

100% PLANS

NORTH AMES STREET SIDEWALK IMPROVEMENTS

WEST MATTHEWS STREET TO PARK CENTER DRIVE

TOWN OF MATTHEWS
MECKLENBURG COUNTY, NC

TYPE OF WORK:
GRADING, SIDEWALK, DRAINAGE, PEDESTRIAN CROSSING, EROSION CONTROL

ENGINEER:

KIMLEY-HORN AND ASSOCIATES, INC.
200 SOUTH TRYON STREET
SUITE 200
CHARLOTTE, NC 28202
PHONE 704-626-1192
CONTACT: ALEX MCINTYRE, P.E.

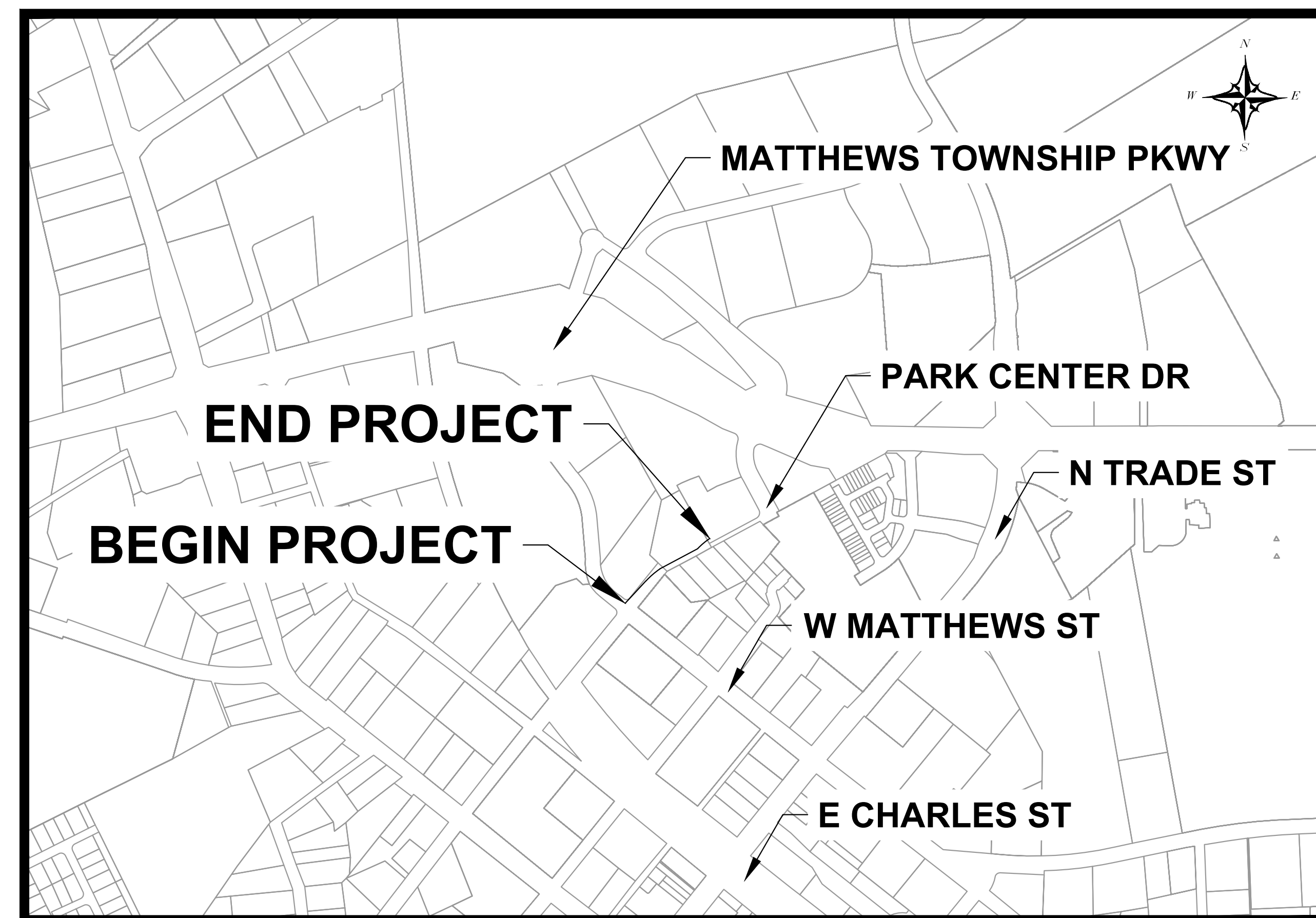
OWNER:

TOWN OF MATTHEWS
232 MATTHEWS STATION ST
MATTHEWS, NC 28105
PHONE (704) 847-4411
CONTACT: DANA STOOGENKE, AICP

SURVEYOR:

**CES GROUP ENGINEERS, LLP
274 N. HIGHWAY 16 BUSINESS
SUITES 200-500
DENVER, NC 28037
PHONE (704) 489 1500
CONTACT: KENT HUDSON, PLS**

CLEARING ON THIS PROJECT SHALL BE PERFORMED
BY THE LIMITS ESTABLISHED BY METHOD 2



VICINITY MAP

NTS

PROJECT LENGTH = 450 FEET
JANUARY 2022

Sheet Index	
Sheet Number	Sheet Title
C-1.0	COVER SHEET
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EC-01-EC-03	EROSION CONTROL NOTES
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XS-01 - XS-04	CROSS SECTIONS

	20	40	60
Plan View			
Horz. Profile			
Vert. Profile			
Cross Section			



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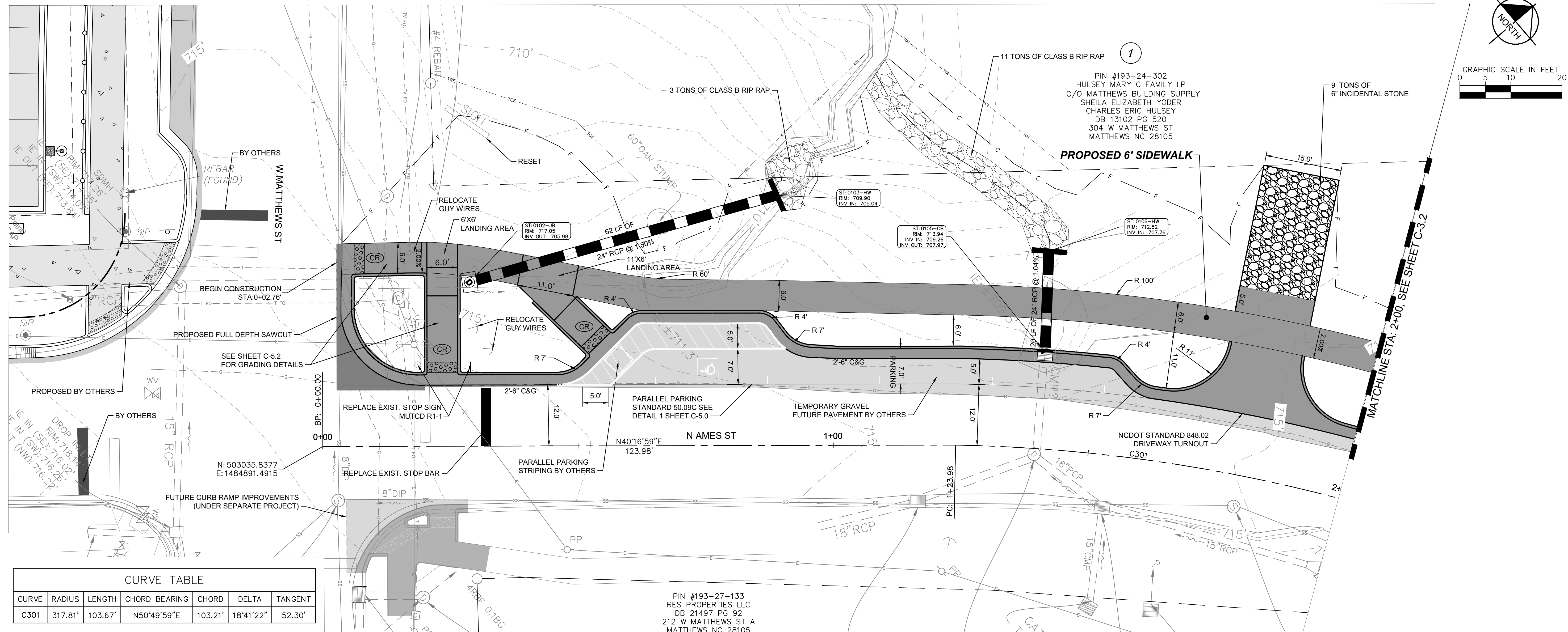
DATE	01/20/2022
SCALE	AS SHOWN
DESIGNED BY	ARM
DRAWN BY	EAC
CHECKED BY	BJT

COVER SHEET

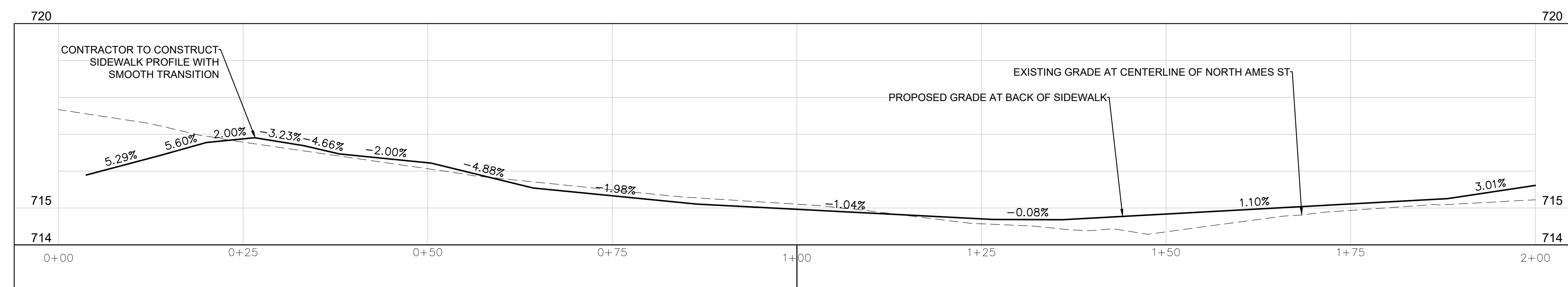
**NORTH AMES STREET
SIDEWALK IMPROVEMENTS**

PREPARED FOR
Town of
Mathews
North Carolina

SHEET NUMBER
C-1.0



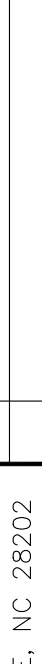
CURVE TABLE						
CURVE	RADIUS	LENGTH	CHORD BEARING	CHORD	DELTA	TANGENT
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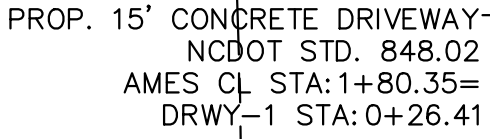
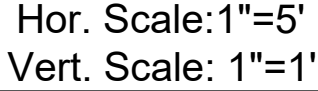


Hor. Scale: 1"=10'
Vert. Scale: 1"=2'



Know what's below.
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<p>NORTH AMES STREET SIDEWALK IMPROVEMENTS</p> <p>PREPARED FOR Town of Matthews North Carolina</p>	<p>PLAN AND PROFILE</p>	<p>KHA PROJECT 015484020</p>		<p>Kimley»Horn</p> <p>© 2021 KIMLEY-HORN AND ASSOCIATES, INC. 200 SOUTH TRYON STREET, SUITE 200, CHARLOTTE, NC 28202 PHONE: 704-333-5131 WWW.KIMLEY-HORN.COM</p>	<p>NO.</p>	<p>REVISIONS</p>	<p>DATE</p>	<p>BY</p>
		<p>DATE 01/20/2022</p> <p>SCALE AS SHOWN</p> <p>DESIGNED BY ARW</p> <p>DRAWN BY EAC</p> <p>CHECKED BY BJT</p>						
<p>SHEET NUMBER C-3.1</p>								



DRWY-1 STA: 0+75.01, 7.50' RT
ELEV: 711.90



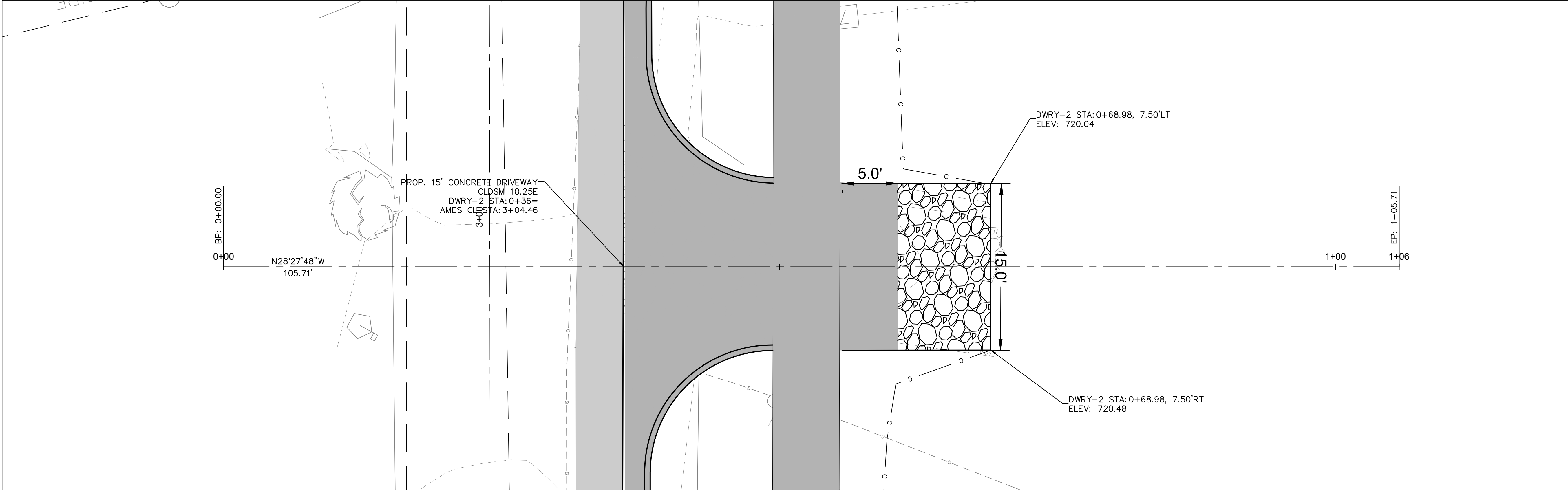
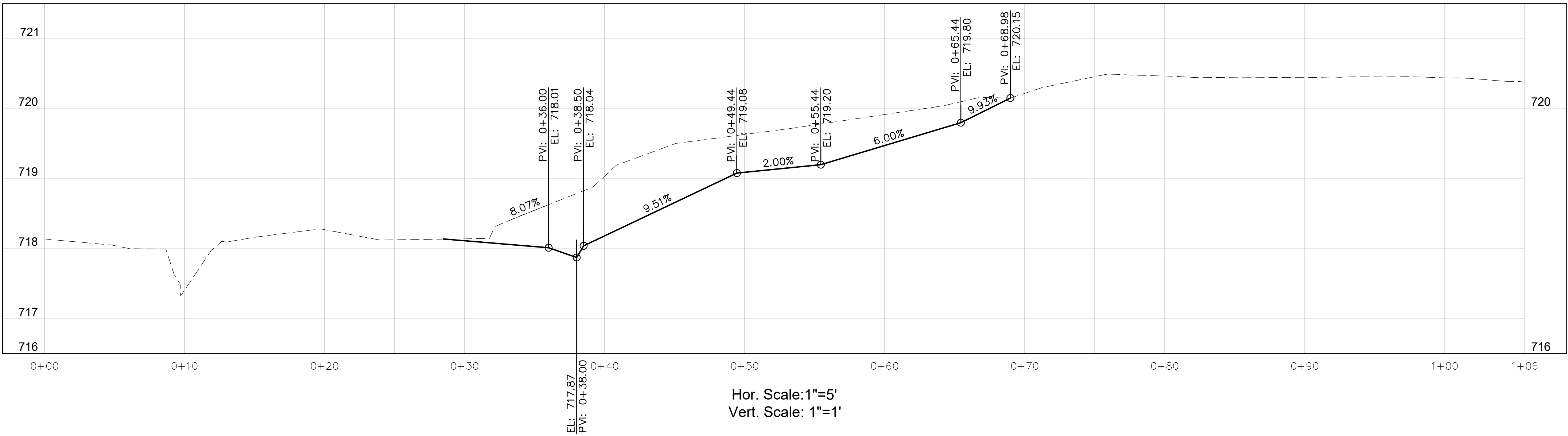
PREPARED FOR
Town of
Mathews
North Carolina

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PHONE: 704-333-5131
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No	REVISIONS	DATE	BY
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Plotted By: McIntyre, Alexandra Sheet Set: North Ames Street Sidewalk Improvements Layout: DS-2 January 20, 2022 06:09:19pm K:\CHL_PRA\015484_Town of Matthews\020 North Ames Street Sidewalk\04_CADD\PlanSheets\C40-DRIVEWAY SECTIONS.dwg

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NORTH AMES STREET
SIDEWALK IMPROVEMENTS
PREPARED FOR
Town of
Matthews
North Carolina

SHEET NUMBER
C-4.1

DRIVEWAY PROFILES

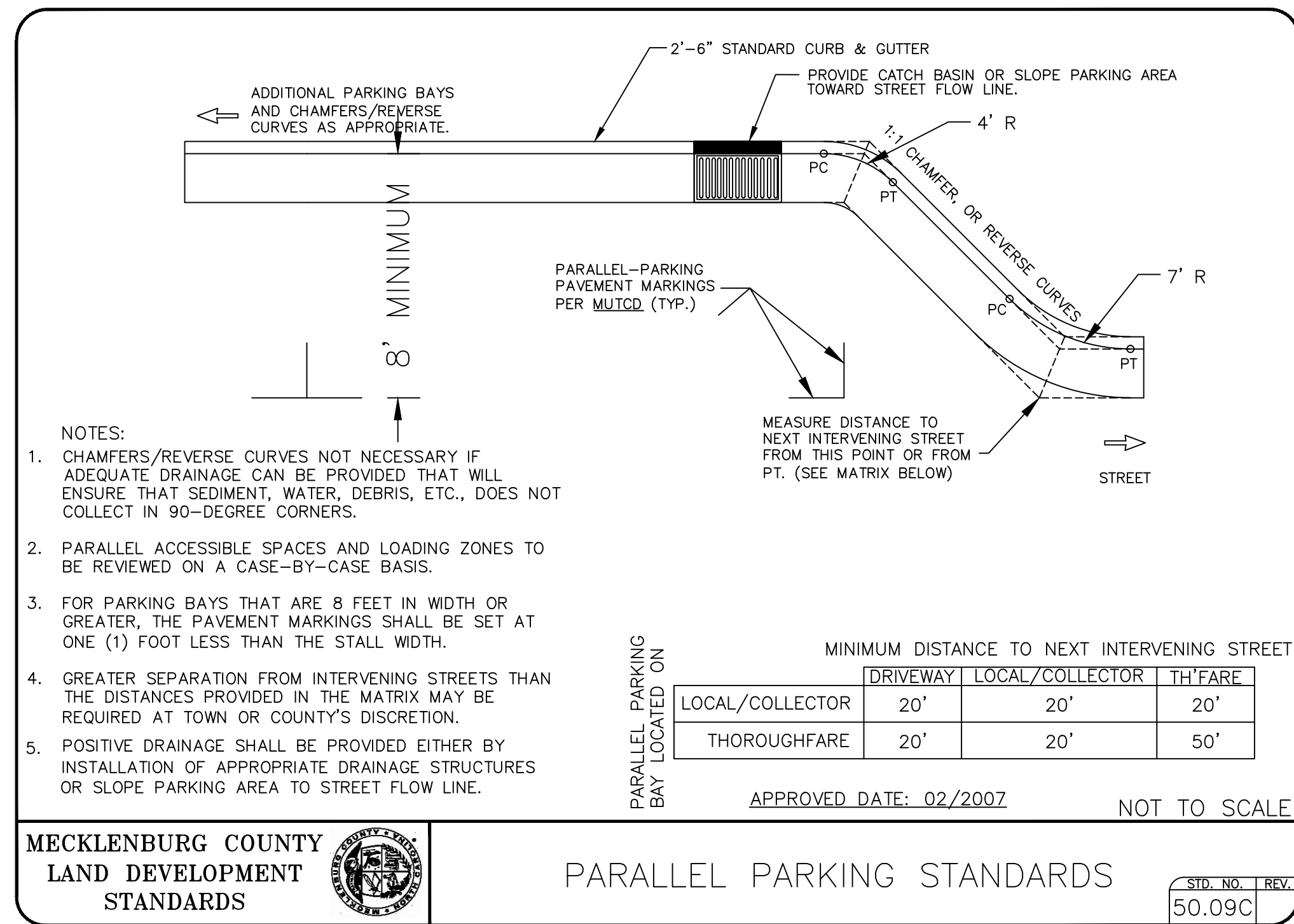
KHA PROJECT	015484020
DATE	01/20/2022
SCALE	AS SHOWN
DESIGNED BY	ARM
DRAWN BY	EAC
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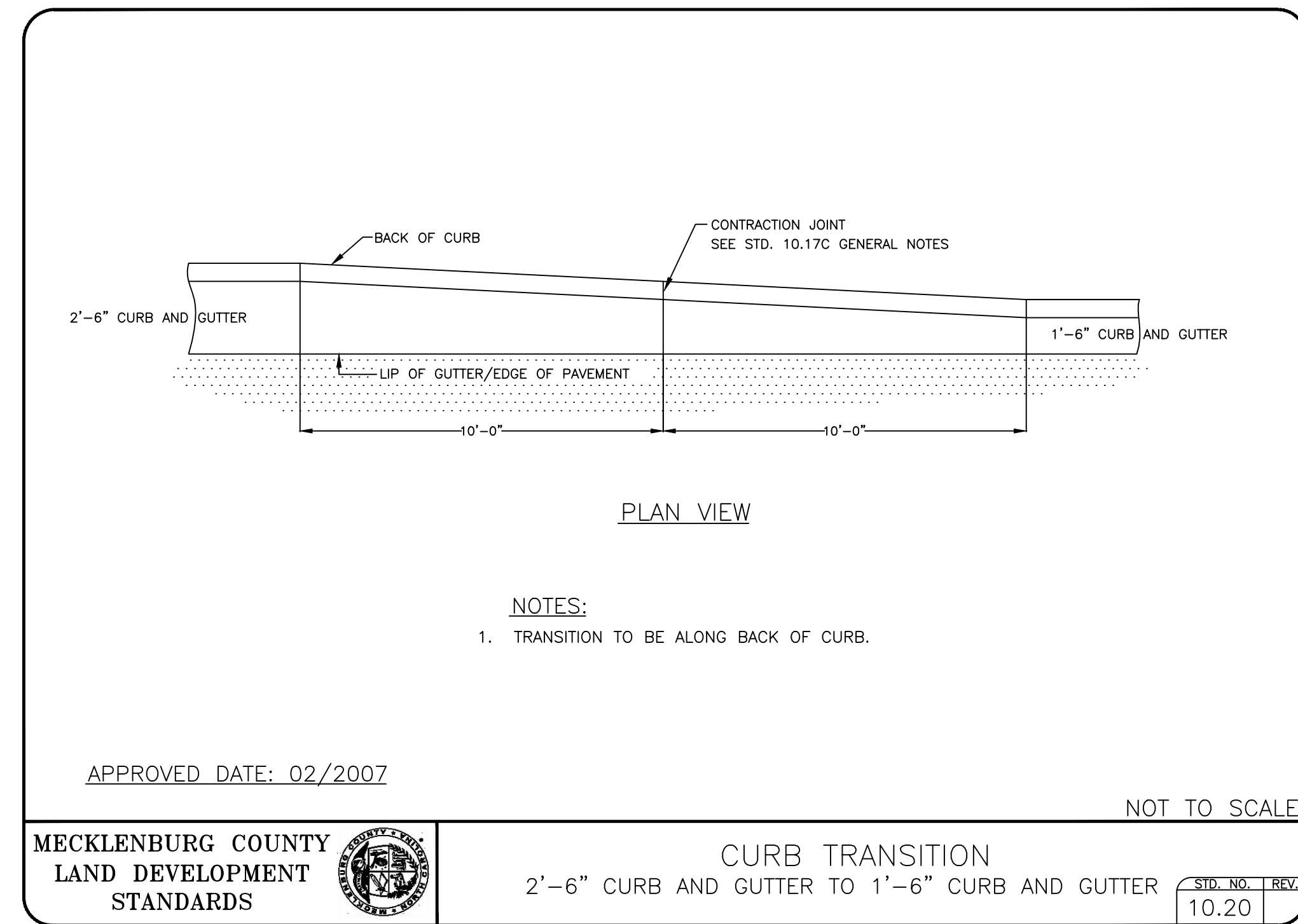
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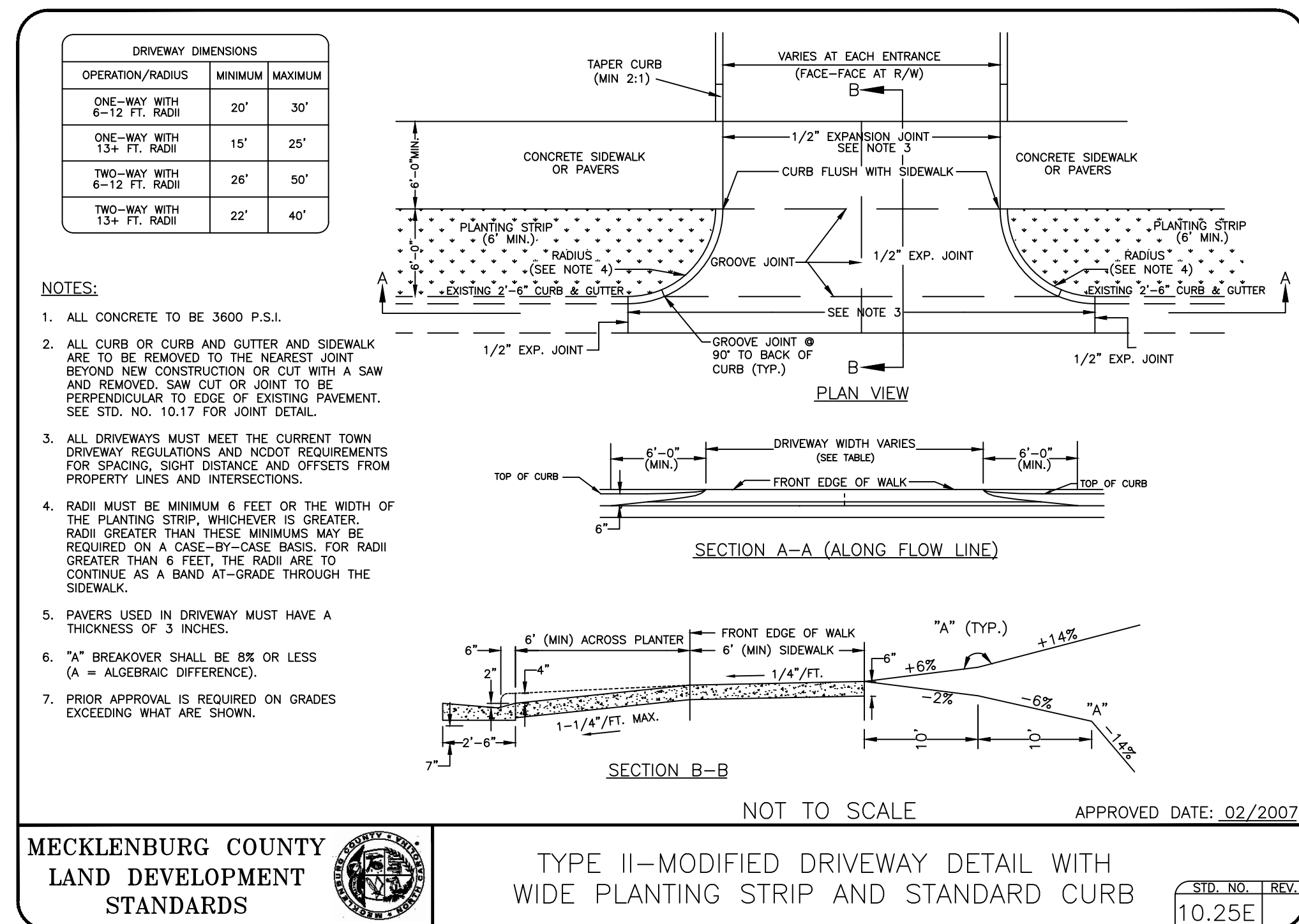
No.	REVISIONS	DATE	BY



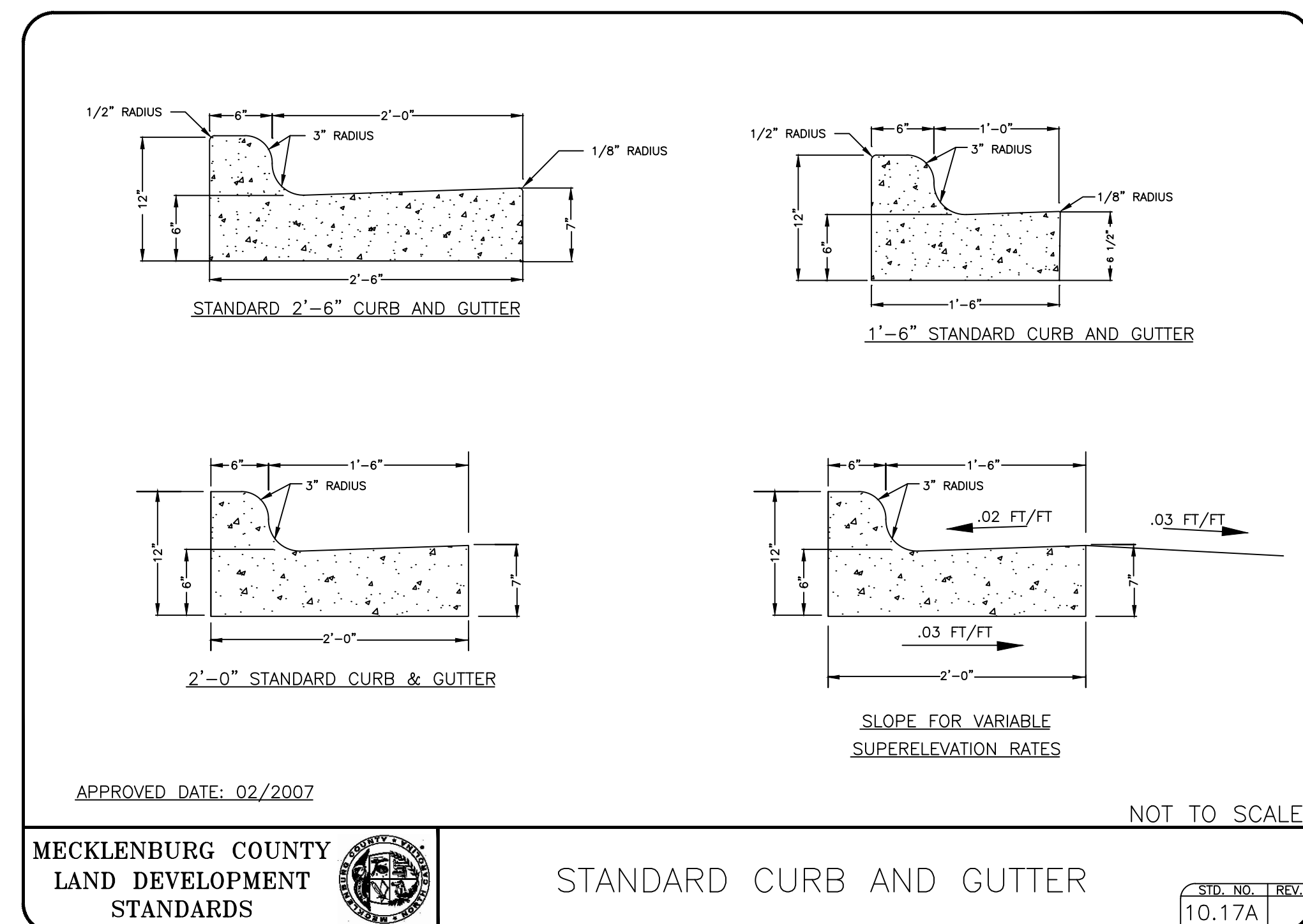
1 PARALLEL PARKING STANDARDS
C-5.0 SCALE: NTS



2 CURB TRANSITION
C-5.0 SCALE: NTS

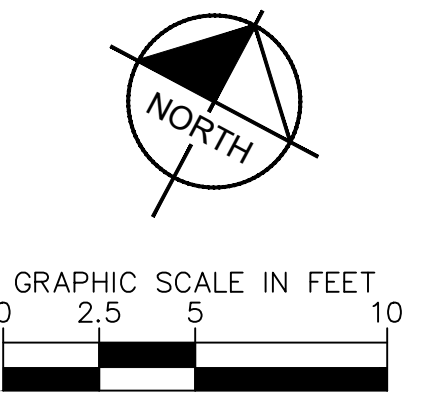
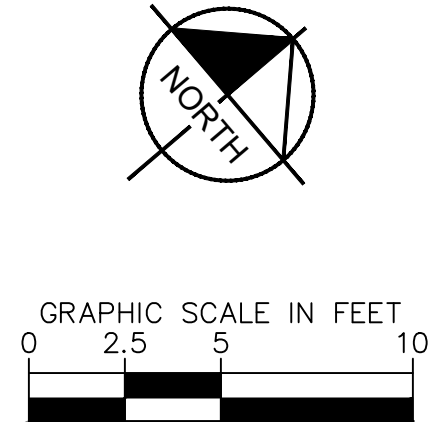
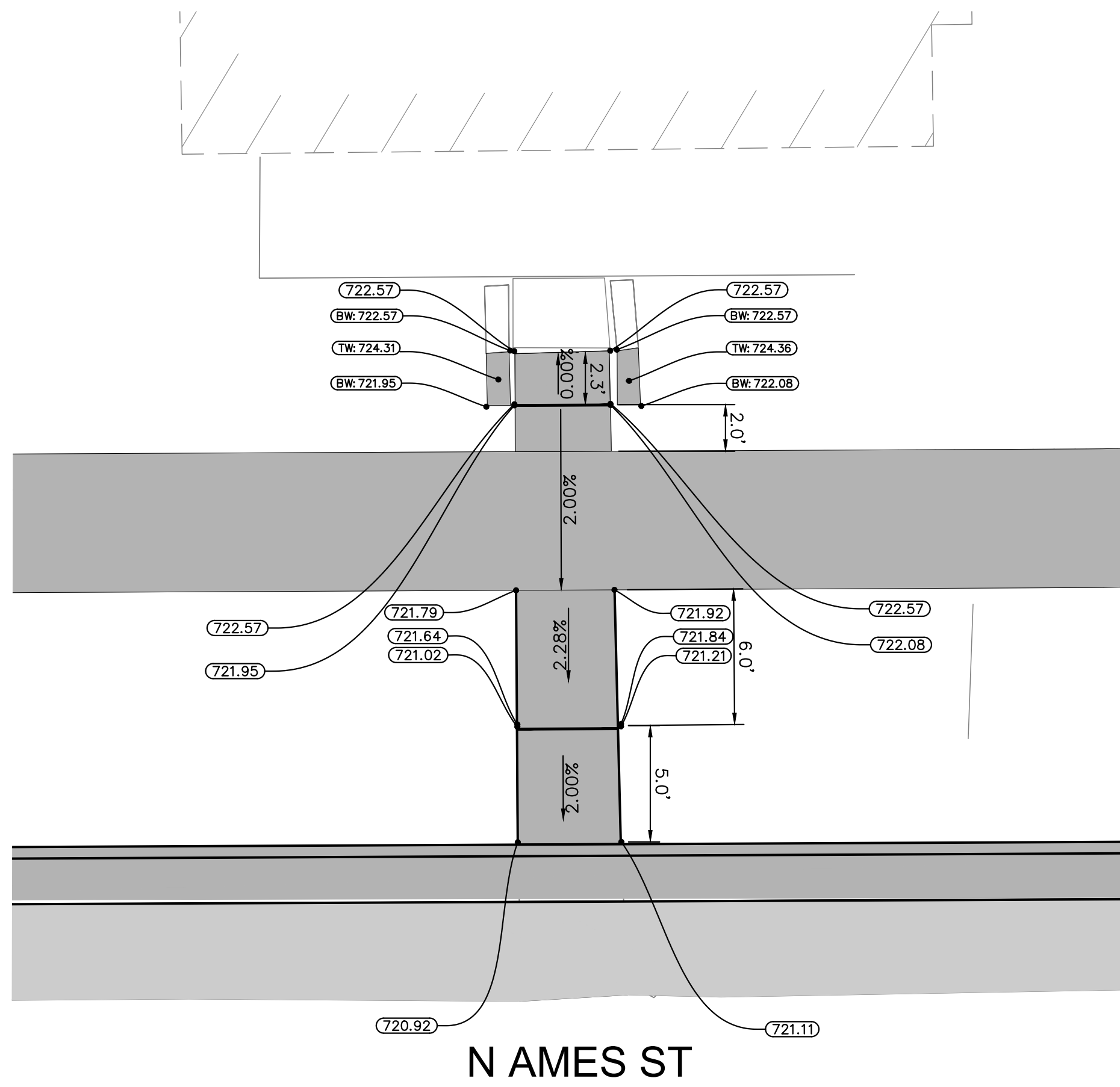
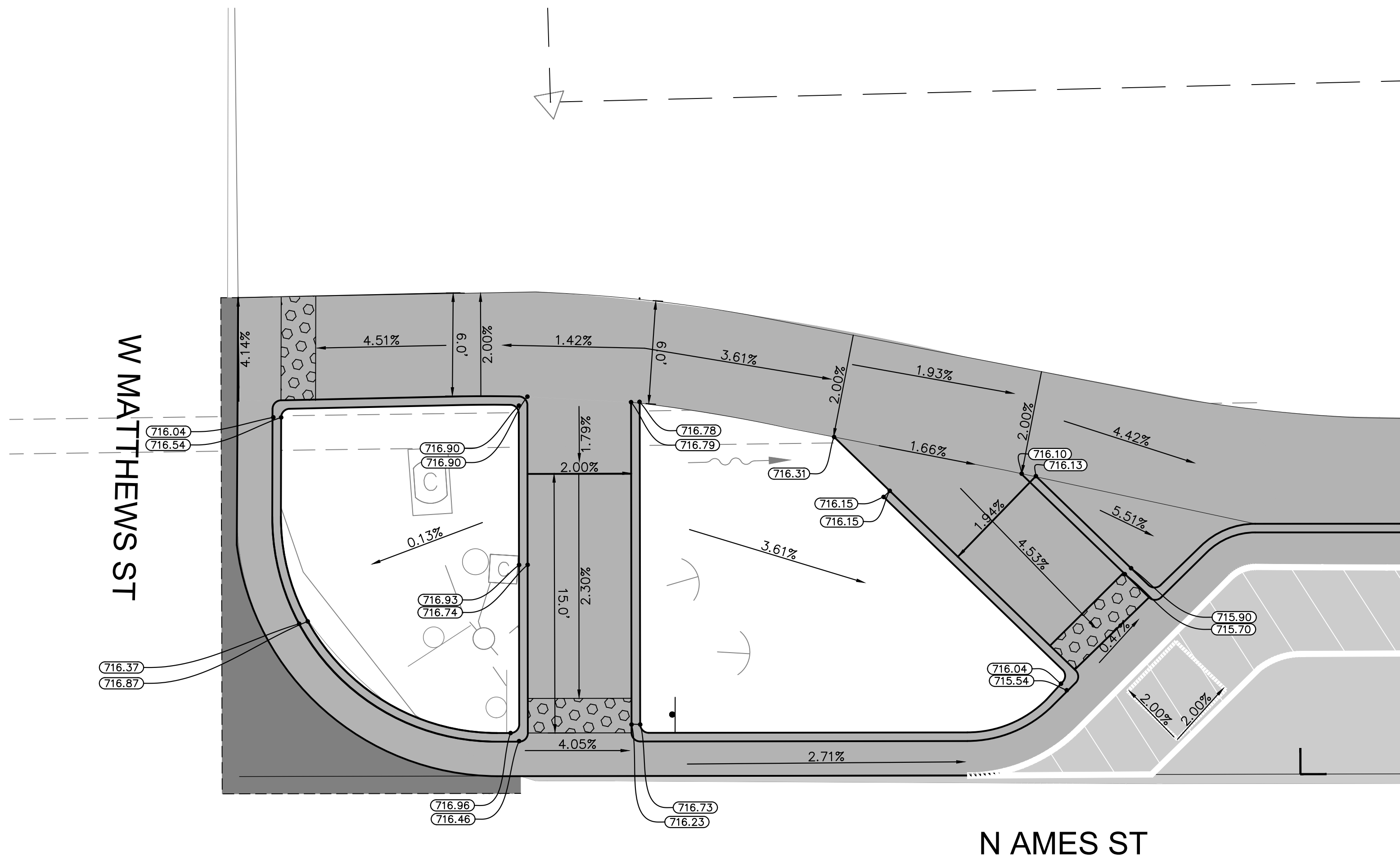


3 TYPE II-MODIFIED DRIVEWAY
C-5.0 SCALE: NTS



4 STANDARD CURB AND GUTTER
C-5.0 SCALE: NTS

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KHA PROJECT 015484020	DATE 01/20/2022	SCALE AS SHOWN	DESIGNED BY ARM	DRAWN BY EAC	CHECKED BY BJT
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GRADING DETAILS

TOWN OF
 MATTHEWS
 NORTH CAROLINA
 PREPARED FOR
 AMES STREET
 IMPROVEMENTS

SHEET NUMBER
C-5.2

Plotted By:McIntyre, Alexandra - Sheet Set:North Ames Street Sidewalk Improvements - Layout:EC-01 - November 19, 2021 - 12:26:23pm - K:\CHL-PRJ\016484 - Town of Matthews\020 North Ames Street Sidewalk\04 - CADD\PlanSheets\C70-EROSION CONTROL.dwg
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- EROSION CONTROL
1. THE CONTRACTOR SHALL INSTALL AND MAINTAIN THROUGHOUT THE PROJECT CONSTRUCTION UNTIL THE FINAL INSPECTION ALL EROSION CONTROL MEASURES SHOWN WITHIN THESE PLANS IN ACCORDANCE WITH APPLICABLE NCDENLR EROSION AND SEDIMENT CONTROL REGULATIONS.

2. ALL EROSION CONTROL MEASURES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE NORTH CAROLINA EROSION AND SEDIMENT CONTROL REGULATIONS, U.S. DEPARTMENT OF AGRICULTURE, AND U.S. SOIL CONSERVATION SERVICE REGULATIONS.

3. ALL CONSTRUCTION WORK SHALL BE IN COMPLIANCE WITH REGULATIONS OF THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) STORM WATER GENERAL PERMIT.

4. THE CONTRACTOR SHALL DILIGENTLY AND CONTINUOUSLY MAINTAIN ALL EROSION CONTROL DEVICES AND STRUCTURES TO MINIMIZE EROSION. THE CONTRACTOR SHALL MAINTAIN CLOSE CONTACT WITH THE NCDENLR EROSION CONTROL INSPECTOR SO THAT PERIODIC INSPECTIONS CAN BE PERFORMED AT APPROPRIATE STAGES OF CONSTRUCTION.

5. APPROVAL OF THIS PLAN IS NOT AN AUTHORIZATION TO GRADE ADJACENT PROPERTIES. WHEN FIELD CONDITIONS WARRANT OFF-SITE GRADING, PERMISSION MUST BE OBTAINED FROM THE AFFECTED PROPERTY OWNERS. CONTACT PROJECT ENGINEER AND PROJECT EROSION CONTROL INSPECTOR TO ENSURE ADDITIONAL EROSION CONTROL MEASURES ARE INSTALLED PRIOR TO OFF-SITE GRADING.

6. STABILIZATION IS THE BEST FORM OF EROSION CONTROL. ALL DISTURBED AREAS WHICH ARE NOT OTHERWISE STABILIZED SHALL BE TOP SOILED AND SEEDED, TEMPORARILY OR PERMANENTLY IN ACCORDANCE WITH THE NORTH CAROLINA SEDIMENT CONTROL REGULATIONS. PERMANENT SEEDING AND GRASS ESTABLISHMENT IS REQUIRED PRIOR TO PROJECT COMPLETION AND ACCEPTANCE.

7. CONTRACTOR SHALL PROVIDE GROUND COVER ON EXPOSED SLOPES WITHIN 14 CALENDAR DAYS FOLLOWING COMPLETION OF ANY PHASE OF GRADING. PERMANENT GROUND COVER FOR ALL DISTURBED AREAS SHALL BE PROVIDED WITHIN 14 CALENDAR DAYS FOLLOWING COMPLETION OF CONSTRUCTION.

8. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN 14 DAYS AFTER FINAL SITE STABILIZATION OR AFTER THE TEMPORARY MEASURES ARE NO LONGER NEEDED. TRAPPED SEDIMENT AND THE DISTURBED SOIL AREAS RESULTING FROM THE DISPOSITION OF TEMPORARY MEASURES SHALL BE PERMANENTLY STABILIZED TO PREVENT FURTHER EROSION AND SEDIMENTATION.

9. WHERE SEDIMENT IS TRANSPORTED ONTO A PAVED OR PUBLIC ROAD SURFACE, THE ROAD SURFACE SHALL BE CLEANED THOROUGHLY AT THE END OF EACH DAY. SEDIMENT SHALL BE REMOVED FROM THE ROADS BY SHOVELING OR SWEEPING AND TRANSPORTED TO A SEDIMENT CONTROL DISPOSAL AREA. STREET WASHING SHALL BE ALLOWED ONLY AFTER SEDIMENT IS REMOVED IN THIS MANNER.

10. WHEN A CRUSHED STONE CONSTRUCTION ENTRANCE HAS BEEN COVERED WITH SOIL OR HAS BEEN PUSHED INTO THE SOIL BY CONSTRUCTION TRAFFIC, IT SHALL BE REPLACED WITH A DEPTH OF STONE EQUAL TO THAT OF THE ORIGINAL APPLICATION.

11. DURING CONSTRUCTION OF THE PROJECT, SOIL STOCKPILES SHALL BE STABILIZED OR PROTECTED WITH SEDIMENT TRAPPING MEASURES. THE APPLICANT IS RESPONSIBLE FOR THE TEMPORARY PROTECTION AND PERMANENT STABILIZATION OF ALL SOIL STOCKPILES ON SITE AS WELL AS SOIL INTENTIONALLY TRANSPORTED FROM THE PROJECT SITE.

12. STABILIZATION OF DISTURBED AREAS SHALL PROGRESS WITH PIPE INSTALLATION. AT NO TIME SHALL PIPE INSTALLATION PROGRESS MORE THAN 500 FEET AHEAD OF FINE GRADING, SEEDING, AND MULCHING OPERATIONS.

13. THE CONTRACTOR SHALL MAINTAIN STORM DRAINAGE DURING PIPE INSTALLATION.

14. DISTURBED AREAS WITHIN THE LIMITS OF CONSTRUCTION SHALL BE GRADED DAILY TO PREVENT PONDING OF STORM WATER RUNOFF AND UNNECESSARY SOIL EROSION.

15. THE ROADWAY CUT SHALL BE BACKFILLED AND STABILIZED AT THE END OF EACH WORK DAY WITH STONE MATERIAL, AND GRADED TO MATCH NORMAL GUTTER LINE ELEVATIONS AND SLOPES SO THAT NORMAL DRAINAGE WILL BE PROVIDED.

16. SECURE EXISTING SANITARY SEWER DURING TRENCHING AND BACKFILLING OPERATION.

17. THE CONTRACTOR SHALL NOTIFY CHARLOTTE-MECKLENBURG UTILITY DEPARTMENT AND PIEDMONT NATURAL GAS COMPANY, INC. PRIOR TO EXCAVATING AT OR NEAR SEWER MAINS, WATER MAINS, AND GAS MAINS.

18. WHEN EXISTING FENCES ARE MOVED DURING CONSTRUCTION, THE CONTRACTOR SHALL SECURE PETS WITH TEMPORARY FENCING UNTIL PERMANENT FENCING IS RESET.

19. THE CONTRACTOR IS TO MAINTAIN CONTINUOUS SANITARY SEWER FLOW AT ALL EXISTING SANITARY SEWERS.

20. THE CONTRACTOR IS TO MAINTAIN CONTINUOUS WATER SERVICE TO ALL RESIDENCES.

21. ANY STOCKPILING OF SOIL ON PAVED SURFACE SHALL HAVE SAND AND OR ROCK SCREENING UNDERNEATH AREA.

22. CONTRACTOR IS RESPONSIBLE FOR AMENDMENTS TO PLAN FOR ADDITIONAL AREAS FOR STAGING PURPOSE. SUCH AREAS WILL BE STABILIZED.

23. PERMANENT VEGETATION SHALL BE INSTALLED IN CONJUNCTION WITH TEMPORARY SEEDING IF CONSTRUCTION OCCURS DURING THE SPECIFIED SEASON IN THE VEGETATION PLANS AND SPECIFICATIONS. IF NOT, PERMANENT VEGETATION SHALL BE PLANTED DURING THE SPECIFIED SEASON.

24. CONTRACTOR IS TO USE NO. 57 STONE WHERE STONE IS REFERENCED FOR ALL SEDIMENTATION AND EROSION CONTROL DETAILS.

25. ADDITIONAL EROSION CONTROL MEASURES AND CONSTRUCTION ENTRANCES/EXITS MAY BE REQUIRED BASED ON FIELD CONDITIONS.
- GROUND STABILIZATION
- i) SOIL STABILIZATION SHALL BE ACHIEVED ON ANY AREA OF A SITE WHERE LAND-DISTURBING ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED ACCORDING TO THE FOLLOWING SCHEDULE:

i) ALL PERIMETER DIKES, SWALES, DITCHES, PERIMETER SLOPES AND ALL SLOPES STEEPER THAN 3 HORIZONTAL TO 1 VERTICAL (3:1) SHALL BE PROVIDED TEMPORARY OR PERMANENT STABILIZATION WITH GROUND COVER AS SOON AS PRACTICABLE BUT IN ANY EVENT WITHIN 7 CALENDAR DAYS FROM THE LAST LAND-DISTURBING ACTIVITY.

ii) ALL OTHER DISTURBED AREAS SHALL BE PROVIDED TEMPORARY OR PERMANENT STABILIZATION WITH GROUND COVER AS SOON AS PRACTICABLE BUT IN ANY EVENT WITHIN 14 CALENDAR DAYS FROM THE LAST LAND-DISTURBING ACTIVITY.

2) CONDITIONS - IN MEETING THE STABILIZATION REQUIREMENTS ABOVE, THE FOLLOWING CONDITIONS OR EXEMPTIONS SHALL APPLY:

i) EXTENSIONS OF TIME MAY BE APPROVED BY THE PERMITTING AUTHORITY BASED ON WEATHER OR OTHER SITE-SPECIFIC CONDITIONS THAT MAKE COMPLIANCE IMPRACTICABLE.

ii) ALL SLOPES 50' IN LENGTH OR GREATER SHALL APPLY THE GROUND COVER WITHIN 7 DAYS EXCEPT WHEN THE SLOPE IS FLATTER THAN 4:1. SLOPES LESS THAN 50' SHALL APPLY GROUND COVER WITHIN 14 DAYS EXCEPT WHEN SLOPES ARE STEEPER THAN 3:1, THE 7 DAY-REQUIREMENT APPLIES.

iii) ANY SLOPED AREA FLATTER THAN 4:1 SHALL BE EXEMPT FROM THE 7-DAY GROUND COVER REQUIREMENT.

iv) SLOPES 10' OR LESS IN LENGTH SHALL BE EXEMPT FROM THE 7-DAY GROUND COVER REQUIREMENT EXCEPT WHEN THE SLOPE IS STEEPER THAN 2:1.

v) ALTHOUGH STABILIZATION IS USUALLY SPECIFIED AS GROUND COVER, OTHER METHODS, SUCH AS CHEMICAL STABILIZATION, MAY BE ALLOWED ON A CASE-BY-CASE BASIS.

vi) FOR PORTIONS OF PROJECTS WITHIN THE SEDIMENT CONTROL COMMISSION-DEFINED "HIGH QUALITY WATER ZONE" (ISA NCAC 04A. 0105) , STABILIZATION WITH GROUND COVER SHALL BE ACHIEVED AS SOON AS PRACTICABLE BUT IN ANY EVENT ON ALL AREAS OF THE SITE WITHIN 7 CALENDAR DAYS FROM THE LAST LAND DISTURBING ACT.

vii) PORTIONS OF A SITE THAT ARE LOWER IN ELEVATION THAN ADJACENT DISCHARGE LOCATIONS AND ARE NOT EXPECTED TO DISCHARGE DURING CONSTRUCTION MAY BE EXEMPT FROM THE TEMPORARY GROUND COVER REQUIREMENTS IF IDENTIFIED ON THE APPROVED E&SC PLAN OR ADDED BY THE PERMITTING AUTHORITY.

- SEDIMENT AND EROSION CONTROL PROCEDURES
1. PRIOR TO CLEARING AND EARTHWORK ACTIVITIES, THE COUNTY/CONSULTANT SHALL OBTAIN AN APPROVED GRADING PERMIT FROM THE NCDENLR INSPECTOR AND THEN INSTALL ALL EROSION CONTROL DEVICES SPECIFIED AND AS INDICATED ON THE DRAWINGS. DURING EACH PHASE OF SITE CONSTRUCTION THE CONTRACTOR SHALL ADJUST, RELOCATE, AND/OR REINSTALL AS APPLICABLE ALL EROSION CONTROL DEVICES AND SEDIMENT DISCHARGE FROM THE SITE.

2. SILT FENCE AND TREE PROTECTION FENCE SHALL BE MAINTAINED AROUND THE PERIMETER OF ALL EARTHWORK AREAS TO PREVENT SEDIMENT TRANSPORT ONTO ADJACENT PROPERTIES, AS APPLICABLE.

3. SILT FENCE FILTER BARRIERS SHALL BE INSTALLED AND MAINTAINED UNTIL CONSTRUCTION IS COMPLETE AND LANDSCAPING IS INSTALLED.

4. THE CONTRACTOR SHALL IMMEDIATELY CLEAN UP AND REPAIR ALL EROSION DAMAGE AFTER DISCOVERY AND REINSTALL ADEQUATE CONTROL MEASURES AS NECESSARY TO PREVENT REOCCURRENCE OF DAMAGE.

5. ALL SEDIMENT CONTROL MEASURES SHALL BE INSPECTED AT LEAST ONCE EVERY SEVEN CALENDAR DAYS AND AFTER ANY STORM EVENT OF GREATER THAN 0.5 INCHES OF PRECIPITATION DURING ANY 24 HOUR PERIOD. ALL SEDIMENT CONTROL FEATURES SHALL BE MAINTAINED UNTIL FINAL STABILIZATION HAS BEEN OBTAINED.

6. STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, BUT IN NO CASE MORE THAN 14 DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS BEEN TEMPORARILY OR PERMANENTLY CEASED.
- MAINTENANCE PLAN
1. ALL EROSION AND SEDIMENTATION CONTROL DEVICES WILL BE CHECKED BY THE CONTRACTOR FOR STABILITY AND OPERATION FOLLOWING EVERY RUNOFF PRODUCING RAINFALL, BUT IN NO CASE LESS THAN ONCE EVERY WEEK. ANY NEEDED REPAIRS WILL BE MADE IMMEDIATELY TO MAINTAIN ALL PRACTICES AS DESIGNED. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE MAINTAINED CONTINUOUSLY, RELOCATED WHEN AND AS NECESSARY, AND SHALL BE CHECKED AFTER EVERY RAINFALL. SEEDED AREAS SHALL BE CHECKED REGULARLY AND SHALL BE WATERED, FERTILIZED, RESEEDED AND MULCHED AS NECESSARY TO OBTAIN A DENSE STAND OF GRASS.

2. MAINTAIN EROSION CONTROL DEVICES AS FOLLOW:

•TEMPORARY SILT FENCE- REMOVE SEDIMENT DEPOSITS AS NECESSARY TO PROVIDE ADEQUATE STORAGE VOLUME FOR THE NEXT RAIN AND TO REDUCE PRESSURE ON THE FENCE. AVOID UNDERMINING THE FENCE.

•TEMPORARY CHECK DAM- REMOVE SEDIMENT ACCUMULATION BEHIND THE DAMS AS NEEDED TO PREVENT DAMAGE TO CHANNEL VEGETATION. ADD STONE TO DAMS AS NEEDED TO MAINTAIN DESIGN HEIGHT AND CROSS SECTION.

•STORM DRAIN INLET PROTECTION- REMOVE SEDIMENT AS NECESSARY TO PROVIDE ADEQUATE STORAGE VOLUME FOR THE NEXT RAINFALL.

•TEMPORARY DIVERSION DITCH- INSPECT TEMPORARY DIVERSIONS ONCE A WEEK AND AFTER EVERY RAINFALL. IMMEDIATELY REMOVE SEDIMENT FROM THE FLOW AREA AND REPAIR THE DIVERSION RIDGE. CAREFULLY CHECK OUTLETS AND MAKE TIMELY REPAIRS AS NEEDED. WHEN THE AREA PROTECTED IS PERMANENTLY STABILIZED, REMOVE THE RIDGE AND THE CHANNEL TO BLEND WITH THE NATURAL GROUND.

3. ALL GRADED AREAS WILL BE SEEDED, FERTILIZED AND MULCHED ACCORDING TO SPECIFICATIONS IN THE VEGETATIVE PLAN TO MAINTAIN A VIGOROUS, DENSE, VEGETATIVE COVER WITHIN FOURTEEN (14) DAYS OF COMPLETION OF ANY PHASE OF GRADING. IF WORK ON THE PROJECT CEASES FOR MORE THAN THE AFOREMENTIONED LENGTH OF TIME, ALL DISTURBED AREAS SHALL HAVE TEMPORARY VEGETATIVE GROUND COVER ESTABLISHED AND EROSION CONTROL DEVICES MAINTAINED.
- SEEDING SCHEDULE AND SEEDBED PREPARATION

SEEDBED PREPARATION

1. GRADED SLOPES AND FILL - THE ANGLE FOR GRADED SLOPES AND FILLS SHALL BE NO GREATER THAN THE ANGLE WHICH CAN BE RETAINED BY VEGETATIVE COVER OR OTHER ADEQUATE EROSION CONTROL DEVICES OR STRUCTURES. IN ANY EVENT, SLOPES LEFT EXPOSED SHALL, WITHIN 14 WORKING DAYS OF COMPLETION OF ANY PHASE OF GRADING, BE PLANTED OR OTHERWISE PROVIDED WITH GROUND COVER, DEVICES, OR STRUCTURES SUFFICIENT TO RESTRAIN EROSION.

2. GROUND COVER - WHENEVER LAND DISTURBING ACTIVITY IS UNDERTAKEN ON A TRACT COMPRISING MORE THAN ONE ACRE, IF MORE THAN ONE CONTIGUOUS ACRE IS UNCOVERED, A GROUND COVER SUFFICIENT TO RESTRAIN EROSION MUST BE PLANTED OR OTHERWISE PROVIDED WITHIN 14 WORKING DAYS ON THAT PORTION OF THE TRACT UPON WHICH FURTHER ACTIVE CONSTRUCTION IS NOT BEING UNDERTAKEN.

3. SURFACE WATER CONTROL MEASURES TO BE INSTALLED ACCORDING TO THE PLANS.

4. AREAS TO BE SEEDED SHALL BE RIPPED AND SPREAD WITH AVAILABLE TOPSOIL 3" DEEP. TOTAL SEEDBED PREPARED DEPTH SHALL BE 4" TO 8" DEEP.

5. LOOSE ROCKS, ROOTS, AND OTHER OBSTRUCTIONS SHALL BE REMOVED FROM THE SURFACE SO THAT THEY WILL NOT INTERFERE WITH ESTABLISHMENT AND MAINTENANCE OF VEGETATION. SURFACE FOR FINAL SEEDBED PREPARATION, AT FINISH GRADES SHOWN, SHALL BE REASONABLY SMOOTH AND UNIFORM.

6. SOIL TEST MUST BE TAKEN. NO AMENDMENTS SHALL BE MADE THAT ARE NOT IN ACCORDANCE WITH SOIL TESTING RESULTS.

7. LIME AND FERTILIZER SHALL BE APPLIED UNIFORMLY AND MIXED WITH THE SOIL DURING SEEDBED PREPARATION.
- STORM DRAINAGE NOTES

1. ALL STORM DRAINAGE PIPE WITHIN PUBLIC ROAD RIGHT-OF-WAYS TO BE CLASS III REINFORCED CONCRETE PIPE PER NCDOT STANDARDS, UNLESS OTHERWISE NOTED.

2. FLARED END SECTION INVERTS ARE SET AT OR SLIGHTLY BELOW EXISTING GRADE. VERIFY ELEVATIONS IN FIELD PRIOR TO CONSTRUCTING PIPE SYSTEMS.

3. A MINIMUM GRADE OF 0.50% SHALL BE MAINTAINED ON ALL PIPES.

4. ALL PIPE AND INLETS MUST BE PROTECTED AT THE CLOSE OF BUSINESS EACH DAY. FLUSHING IS NOT AN ACCEPTABLE METHOD OF CLEANING.

5. SUBSURFACE DRAINAGE FACILITIES MAY BE REQUIRED IN THE STREET RIGHT-OF-WAY IF DEEMED NECESSARY BY THE INSPECTOR.

6. NO MORE THAN 500 LINEAR FEET OF TRENCH MAY BE OPENED AT ONE TIME.

7. EXCAVATED MATERIAL SHALL BE PLACED ON THE UPHILL SIDE OF TRENCHES.

8. EFFLUENT FROM DENATURING OPERATIONS SHALL BE FILTERED OR PASSED THROUGH AN APPROVED SEDIMENT TRAPPING DEVICE, OR BOTH, AND DISCHARGED IN A MANNER THAT DOES NOT ADVERSELY AFFECT FLOWING STREAMS OR OFF-SITE PROPERTY.

9. MATERIAL USED FOR BACK-FILLING TRENCHES SHALL BE PROPERLY COMPACTED IN ORDER TO MINIMIZE EROSION AND PROMOTE STABILIZATION.

10. RESTABILIZATION SHALL BE ACCOMPLISHED IN ACCORDANCE WITH THE EROSION AND SEDIMENT CONTROL REGULATIONS.

11. APPLICABLE SAFETY REGULATIONS SHALL BE COMPLIED WITH.

GRADING

1. THE CONTRACTOR IS RESPONSIBLE FOR THE LOCATION AND PROTECTION OF ALL EXISTING UTILITIES DURING CONSTRUCTION. AT LEAST 48 HOURS PRIOR TO ANY DEMOLITION, GRADING, OR CONSTRUCTION ACTIVITY THE CONTRACTOR SHALL NOTIFY THE NORTH CAROLINA ONE-CALL UTILITIES LOCATION SERVICE AT 1-800-632-4949 FOR PROPER IDENTIFICATION OF EXISTING UTILITIES WITHIN THE PROJECT SITE.

2. CONTRACTOR IS RESPONSIBLE FOR THE REPAIR AND REPLACEMENT OF ANY CURB & GUTTER, PAVEMENT, LANDSCAPING, ETC. THAT MAY BE DAMAGED DURING CONSTRUCTION. DAMAGED ITEMS SHALL BE REPAIRED TO AT LEAST THE QUALITY OF WORKMANSHIP FOUND IN THE ORIGINAL ITEM.

3. ALL AREAS SHALL BE GRADED FOR POSITIVE DRAINAGE.

4. CONTRACTOR IS RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF ALL EROSION CONTROL DEVICES SHOWN ON THE APPROVED PLANS FOR THE DURATION OF CONSTRUCTION OR UNTIL FINAL INSPECTION AND APPROVAL.

5. IN ORDER TO ENSURE PROPER DRAINAGE, MAINTAIN A MINIMUM 0.50% SLOPE ON THE CURB.

6. ALL MATERIALS USED FOR FILL OR BACK-FILL SHALL BE FREE OF WOOD, ROOTS, ROCKS, BOULDERS OR ANY OTHER NON-COMPACTABLE SOIL TYPE MATERIAL. UNSATISFACTORY MATERIALS ALSO INCLUDE MAN-MADE FILLS REFUSE DEBRIS DERIVED FROM ANY SOURCE.

7. ALL CONTOURS AND SPOT ELEVATIONS REFLECT FINISHED GRADES. REFER TO THE PAVEMENT CROSS-SECTION DETAILS TO ESTABLISH THE CORRECT SUBBASE OR AGGREGATE BASE COURSE ELEVATIONS.

8. ALL CONTOURS ARE IN REFERENCE TO THE BENCHMARK AND MUST BE VERIFIED BY THE CONTRACTOR PRIOR TO GROUND BREAKING.

9. CONTRACTOR SHALL BLEND NEW EARTHWORK SMOOTHLY TO TRANSITION BACK TO EXISTING GRADE.

10. THE LIMITS OF CLEARING SHOWN ON THE GRADING AND EROSION CONTROL PLAN IS BASED ON THE APPROXIMATE CUT AND FILL SLOPE LIMITS, OR OTHER GRADING REQUIREMENTS.

11. SLOPES SHALL BE GRADED NO STEEPER THAN 2:1 WITHOUT A GUARDRAIL OR SAFETY RAIL.

12. COORDINATE ALL CURB AND STREET GRADES AT INTERSECTIONS WITH MECKLENBURG COUNTY INSPECTORS.

13. ALL DEBRIS FROM CLEARING OPERATIONS SHALL BE DISPOSED OF IN A LEGAL MANNER.

14. HAUL ROADS USED DURING CONSTRUCTION SHALL BE OUTSIDE THE STREAM TOP OF BANK TO THE EXTENT POSSIBLE. HAUL ROADS SHALL FOLLOW THE NATURAL CONTOURS OF THE TERRAIN IF POSSIBLE. A 6" COURSE OF #57 STONE SHALL BE SPREAD OVER HAUL ROADS IN AREAS THAT ARE SUBJECT TO WET CONDITIONS. PROVIDE SUBSURFACE DRAINS IN SEEPAGE AREAS OR SEASONALLY WET AREAS.

MISCELLANEOUS NOTES

1. CONTRACTOR TO INSTALL IMPERVIOUS DIKES ALONG THE STREAM AS NEEDED AND UTILIZE SPECIAL STILLING BASINS FOR DEWATERING.

2. PROPOSED CONTOURS SHOWN AS APPROXIMATE ONLY TO ILLUSTRATE GENERAL FLOW PATHS. SEE CROSS SECTIONS FOR ACTUAL ELEVATIONS.

3. DO NOT INSTALL FILTER BAG INLET PROTECTION UNTIL GRADING BEGINS THAT WILL REQUIRE THE PROTECTION.

4. STABILIZE ALL SLOPES 3:1 AND GREATER WITH MULCH AND SEED AS NOTED IN EROSION CONTROL DETAILS. STABILIZE AS SHOWN (UNLESS OTHERWISE NOTES) ON THIS PLAN WITHIN 14 DAYS OF COMPLETION PER EROSION CONTROL NOTES.

ACREAGE SUMMARY

1. PROJECT DISTURBED AREA ±0.54 ACRES

Know what's below.
Call before you dig.

PROJECT NO.

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AS SHOWN

DESIGNED BY

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GROUND STABILIZATION AND MATERIALS HANDLING PRACTICES FOR COMPLIANCE WITH THE NCG01 CONSTRUCTION GENERAL PERMIT

Implementing the details and specifications on this plan sheet will result in the construction activity being considered compliant with the Ground Stabilization and Materials Handling sections of the NCG01 Construction General Permit (Sections E and F, respectively). The permittee shall comply with the Erosion and Sediment Control plan approved by the delegated authority having jurisdiction. All details and specifications shown on this sheet may not apply depending on site conditions and the delegated authority having jurisdiction.

SECTION E: GROUND STABILIZATION

Required Ground Stabilization Timeframes		
Site Area Description	Stabilize within this many calendar days after ceasing land disturbance	Timeframe variations
(a) Perimeter dikes, swales, ditches, and perimeter slopes	7	None
(b) High Quality Water (HQP) Zones	7	None
(c) Slopes steeper than 3:1	7	If slopes are 10' or less in length and are not steeper than 2:1, 14 days are allowed
(d) Slopes 3:1 to 4:1	14	-7 days for slopes greater than 50' in length and with slopes steeper than 4:1 -7 days for perimeter dikes, swales, ditches, perimeter slopes and HPQ Zones -10 days for Falls Lake Watershed
(e) Areas with slopes flatter than 4:1	14	-7 days for perimeter dikes, swales, ditches, perimeter slopes and HPQ Zones -10 days for Falls Lake Watershed unless there is zero slope

Note: After the permanent cessation of construction activities, any areas with temporary ground stabilization shall be converted to permanent ground stabilization as soon as practicable but in no case longer than 90 calendar days after the last land disturbing activity. Temporary ground stabilization shall be maintained in a manner to render the surface stable against accelerated erosion until permanent ground stabilization is achieved.

GROUND STABILIZATION SPECIFICATION

Stabilize the ground sufficiently so that rain will not dislodge the soil. Use one of the techniques in the table below:

Temporary Stabilization	Permanent Stabilization
<ul style="list-style-type: none"> • Temporary grass seed covered with straw or other mulches and tackifiers • Hydroseeding • Rolled erosion control products with or without temporary grass seed • Appropriately applied straw or other mulch • Plastic sheeting 	<ul style="list-style-type: none"> • Permanent grass seed covered with straw or other mulches and tackifiers • Geotextile fabrics such as permanent soil reinforcement matting • Hydroseeding • Shrubs or other permanent plantings covered with mulch • Uniform and evenly distributed ground cover sufficient to restrain erosion • Structural methods such as concrete, asphalt or retaining walls • Rolled erosion control products with grass seed

POLYACRYLAMIDES (PAMS) AND FLOCCULANTS

1. Select flocculants that are appropriate for the soils being exposed during construction, selecting from the *NC DWR List of Approved PAMS/Flocculants*.
2. Apply flocculants at or before the inlets to Erosion and Sediment Control Measures.
3. Apply flocculants at the concentrations specified in the *NC DWR List of Approved PAMS/Flocculants* and in accordance with the manufacturer's instructions.
4. Provide ponding area for containment of treated Stormwater before discharging offsite.
5. Store flocculants in leak-proof containers that are kept under storm-resistant cover or surrounded by secondary containment structures.

EQUIPMENT AND VEHICLE MAINTENANCE

1. Maintain vehicles and equipment to prevent discharge of fluids.
2. Provide drip pans under any stored equipment.
3. Identify leaks and repair as soon as feasible, or remove leaking equipment from the project.
4. Collect all spent fluids, store in separate containers and properly dispose as hazardous waste (recycle when possible).
5. Remove leaking vehicles and construction equipment from service until the problem has been corrected.
6. Bring used fuels, lubricants, coolants, hydraulic fluids and other petroleum products to a recycling or disposal center that handles these materials.

LITTER, BUILDING MATERIAL AND LAND CLEARING WASTE

1. Never bury or burn waste. Place litter and debris in approved waste containers.
2. Provide a sufficient number and size of waste containers (e.g. dumpster, trash receptacle) on site to contain construction and domestic wastes.
3. Locate waste containers at least 50 feet away from storm drain inlets and surface waters unless no other alternatives are reasonably available.
4. Locate waste containers on areas that do not receive substantial amounts of runoff from upland areas and does not drain directly to a storm drain, stream or wetland.
5. Cover waste containers at the end of each workday and before storm events or provide secondary containment. Repair or replace damaged waste containers.
6. Anchor all lightweight items in waste containers during times of high winds.
7. Empty waste containers as needed to prevent overflow. Clean up immediately if containers overflow.
8. Dispose waste off-site at an approved disposal facility.
9. On business days, clean up and dispose of waste in designated waste containers.

PAINT AND OTHER LIQUID WASTE

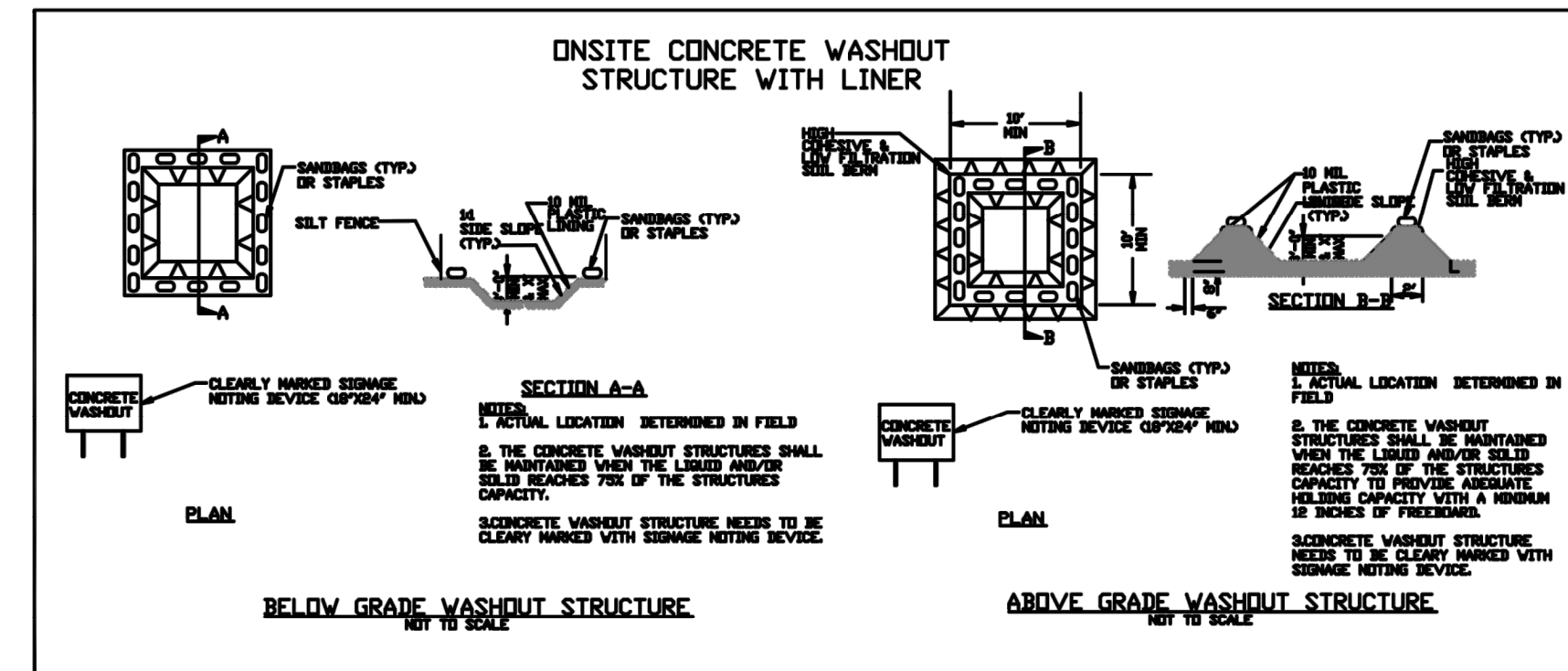
1. Do not dump paint and other liquid waste into storm drains, streams or wetlands.
2. Locate paint washouts at least 50 feet away from storm drain inlets and surface waters unless no other alternatives are reasonably available.
3. Contain liquid wastes in a controlled area.
4. Containment must be labeled, sized and placed appropriately for the needs of site.
5. Prevent the discharge of soaps, solvents, detergents and other liquid wastes from construction sites.

PORTABLE TOILETS

1. Install portable toilets on level ground, at least 50 feet away from storm drains, streams or wetlands unless there is no alternative reasonably available. If 50 foot offset is not attainable, provide relocation of portable toilet behind silt fence or place on a gravel pad and surround with sand bags.
2. Provide staking or anchoring of portable toilets during periods of high winds or in high foot traffic areas.
3. Monitor portable toilets for leaking and properly dispose of any leaked material. Utilize a licensed sanitary waste hauler to remove leaking portable toilets and replace with properly operating unit.

EARTHEN STOCKPILE MANAGEMENT

1. Show stockpile locations on plans. Locate earthen-material stockpile areas at least 50 feet away from storm drain inlets, sediment basins, perimeter sediment controls and surface waters unless it can be shown no other alternatives are reasonably available.
2. Protect stockpile with silt fence installed along toe of slope with a minimum offset of five feet from the toe of stockpile.
3. Provide stable stone access point when feasible.
4. Stabilize stockpile within the timeframes provided on this sheet and in accordance with the approved plan and any additional requirements. Soil stabilization is defined as vegetative, physical or chemical coverage techniques that will restrain accelerated erosion on disturbed soils for temporary or permanent control needs.



CONCRETE WASHOUTS

1. Do not discharge concrete or cement slurry from the site.
2. Dispose of, or recycle settled, hardened concrete residue in accordance with local and state solid waste regulations and at an approved facility.
3. Manage washout from mortar mixers in accordance with the above item and in addition place the mixer and associated materials on impervious barrier and within lot perimeter silt fence.
4. Install temporary concrete washouts per local requirements, where applicable. If an alternate method or product is to be used, contact your approval authority for review and approval. If local standard details are not available, use one of the two types of temporary concrete washouts provided on this detail.
5. Do not use concrete washouts for dewatering or storing defective curb or sidewalk sections. Stormwater accumulated within the washout may not be pumped into or discharged to the storm drain system or receiving surface waters. Liquid waste must be pumped out and removed from project.
6. Locate washouts at least 50 feet from storm drain inlets and surface waters unless it can be shown that no other alternatives are reasonably available. At a minimum, install protection of storm drain inlet(s) closest to the washout which could receive spills or overflow.
7. Locate washouts in an easily accessible area, on level ground and install a stone entrance pad in front of the washout. Additional controls may be required by the approving authority.
8. Install at least one sign directing concrete trucks to the washout within the project limits. Post signage on the washout itself to identify this location.
9. Remove leavings from the washout when at approximately 75% capacity to limit overflow events. Replace the tarp, sand bags or other temporary structural components when no longer functional. When utilizing alternative or proprietary products, follow manufacturer's instructions.
10. At the completion of the concrete work, remove remaining leavings and dispose of in an approved disposal facility. Fill pit, if applicable, and stabilize any disturbance caused by removal of washout.

HERBICIDES, PESTICIDES AND RODENTICIDES

1. Store and apply herbicides, pesticides and rodenticides in accordance with label restrictions.
2. Store herbicides, pesticides and rodenticides in their original containers with the label, which lists directions for use, ingredients and first aid steps in case of accidental poisoning.
3. Do not store herbicides, pesticides and rodenticides in areas where flooding is possible or where they may spill or leak into wells, stormwater drains, ground water or surface water. If a spill occurs, clean area immediately.
4. Do not stockpile these materials onsite.

HAZARDOUS AND TOXIC WASTE

1. Create designated hazardous waste collection areas on-site.
2. Place hazardous waste containers under cover or in secondary containment.
3. Do not store hazardous chemicals, drums or bagged materials directly on the ground.

PART III

SELF-INSPECTION, RECORDKEEPING AND REPORTING

SECTION A: SELF-INSPECTION

Self-inspections are required during normal business hours in accordance with the table below. When adverse weather or site conditions would cause the safety of the inspection personnel to be in jeopardy, the inspection may be delayed until the next business day on which it is safe to perform the inspection. In addition, when a storm event of equal to or greater than 1.0 inch occurs outside of normal business hours, the self-inspection shall be performed upon the commencement of the next business day. Any time when inspections were delayed shall be noted in the Inspection Record.

Inspect	Frequency (during normal business hours)	Inspection records must include:
(1) Rain gauge maintained in good working order	Daily	Daily rainfall amounts. If no daily rain gauge observations are made during weekend or holiday periods, and no individual-day rainfall information is available, record the cumulative rain measurement for those unattended days (and this will determine if a site inspection is needed). Days on which no rainfall occurred shall be recorded as "zero." The permittee may use another rain-monitoring device approved by the Division.
(2) E&SC Measures	At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours	<ol style="list-style-type: none"> 1. Identification of the measures inspected, 2. Date and time of the inspection, 3. Name of the person performing the inspection, 4. Indication of whether the measures were operating properly, 5. Description of maintenance needs for the measure, 6. Description, evidence, and date of corrective actions taken.
(3) Stormwater discharge outfalls (SDOs)	At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours	<ol style="list-style-type: none"> 1. Identification of the discharge outfalls inspected, 2. Date and time of the inspection, 3. Name of the person performing the inspection, 4. Evidence of indicators of stormwater pollution such as oil sheen, floating or suspended solids or discoloration, 5. Indication of visible sediment leaving the site, 6. Description, evidence, and date of corrective actions taken.
(4) Perimeter of site	At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours	<p>If visible sedimentation is found outside site limits, then a record of the following shall be made:</p> <ol style="list-style-type: none"> 1. Actions taken to clean up or stabilize the sediment that has left the site limits, 2. Description, evidence, and date of corrective actions taken, and 3. An explanation as to the actions taken to control future releases.
(5) Streams or wetlands onsite or offsite (where accessible)	At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours	<p>If the stream or wetland has increased visible sedimentation or a stream has visible increased turbidity from the construction activity, then a record of the following shall be made:</p> <ol style="list-style-type: none"> 1. Description, evidence and date of corrective actions taken, and 2. Records of the required reports to the appropriate Division Regional Office per Part III, Section C, Item (2)(a) of this permit of this permit.
(6) Ground stabilization measures	After each phase of grading	<ol style="list-style-type: none"> 1. The phase of grading (installation of perimeter E&SC measures, clearing and grubbing, installation of storm drainage facilities, completion of all land-disturbing activity, construction or redevelopment, permanent ground cover). 2. Documentation that the required ground stabilization measures have been provided within the required timeframe or an assurance that they will be provided as soon as possible.

NOTE: The rain inspection resets the required 7 calendar day inspection requirement.



PART III

SELF-INSPECTION, RECORDKEEPING AND REPORTING

SECTION B: RECORDKEEPING

1. E&SC Plan Documentation

The approved E&SC plan as well as any approved deviation shall be kept on the site. The approved E&SC plan must be kept up-to-date throughout the coverage under this permit. The following items pertaining to the E&SC plan shall be documented in the manner described:

Item to Document	Documentation Requirements
(a) Each E&SC Measure has been installed and does not significantly deviate from the locations, dimensions and relative elevations shown on the approved E&SC Plan.	Initial and date each E&SC Measure on a copy of the approved E&SC Plan or complete, date and sign an inspection report that lists each E&SC Measure shown on the approved E&SC Plan. This documentation is required upon the initial installation of the E&SC Measures or if the E&SC Measures are modified after initial installation.
(b) A phase of grading has been completed.	Initial and date a copy of the approved E&SC Plan or complete, date and sign an inspection report to indicate completion of the construction phase.
(c) Ground cover is located and installed in accordance with the approved E&SC Plan.	Initial and date a copy of the approved E&SC Plan or complete, date and sign an inspection report to indicate compliance with approved ground cover specifications.
(d) The maintenance and repair requirements for all E&SC Measures have been performed.	Complete, date and sign an inspection report.
(e) Corrective actions have been taken to E&SC Measures.	Initial and date a copy of the approved E&SC Plan or complete, date and sign an inspection report to indicate the completion of the corrective action.

2. Additional Documentation

In addition to the E&SC Plan documents above, the following items shall be kept on the site and available for agency inspectors at all times during normal business hours, unless the Division provides a site-specific exemption based on unique site conditions that make this requirement not practical:

- (a) This general permit as well as the certificate of coverage, after it is received.
- (b) Records of inspections made during the previous 30 days. The permittee shall record the required observations on the Inspection Record Form provided by the Division or a similar inspection form that includes all the required elements. Use of electronically-available records in lieu of the required paper copies will be allowed if shown to provide equal access and utility as the hard-copy records.
- (c) All data used to complete the Notice of Intent and older inspection records shall be maintained for a period of three years after project completion and made available upon request. [40 CFR 122.41]

PART III

SELF-INSPECTION, RECORDKEEPING AND REPORTING

SECTION C: REPORTING

1. Occurrences that must be reported

Permittees shall report the following occurrences:

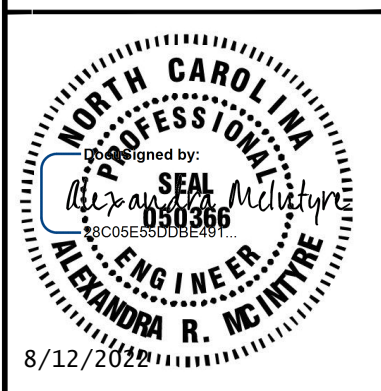
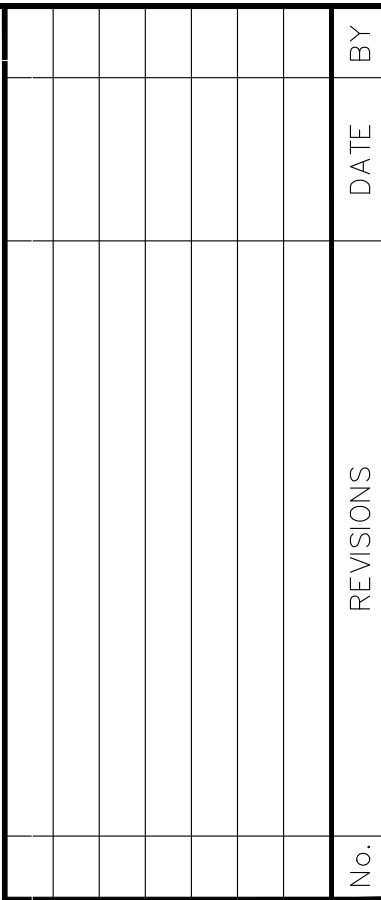
- (a) Visible sediment deposition in a stream or wetland.
- (b) Oil spills if:
- They are 25 gallons or more,
 - They are less than 25 gallons but cannot be cleaned up within 24 hours,
 - They cause sheen on surface waters (regardless of volume), or
 - They are within 100 feet of surface waters (regardless of volume).

- (a) Releases of hazardous substances in excess of reportable quantities under Section 311 of the Clean Water Act (Ref: 40 CFR 110.3 and 40 CFR 117.3) or Section 102 of CERCLA (Ref: 40 CFR 302.4) or G.S. 143-215.85.
- (b) Anticipated bypasses and unanticipated bypasses.
- (c) Noncompliance with the conditions of this permit that may endanger health or the environment.

2. Reporting Timeframes and Other Requirements

After a permittee becomes aware of an occurrence that must be reported, he shall contact the appropriate Division regional office within the timeframes and in accordance with the other requirements listed below. Occurrences outside normal business hours may also be reported to the Division's Emergency Response personnel at (800) 662-7956, (800) 858-0368 or (919) 733-3300.

Occurrence	Reporting Timeframes (After Discovery) and Other Requirements
(a) Visible sediment deposition in a stream or wetland	<ul style="list-style-type: none"> • Within 24 hours, an oral or electronic notification. • Within 7 calendar days, a report that contains a description of the sediment and actions taken to address the cause of the deposition. Division staff may waive the requirement for a written report on a case-by-case basis. • If the stream is named on the NC 303(d) list as impaired for sediment-related causes, the permittee may be required to perform additional monitoring, inspections or apply more stringent practices if staff determine that additional requirements are needed to assure compliance with the federal or state impaired-waters conditions.
(b) Oil spills and release of hazardous substances per Item 1(b)-(c) above	<ul style="list-style-type: none"> • Within 24 hours, an oral or electronic notification. The notification shall include information about the date, time, nature, volume and location of the spill or release.
(c) Anticipated bypasses [40 CFR 122.41(m)(3)]	<ul style="list-style-type: none"> • A report at least ten days before the date of the bypass, if possible. The report shall include an evaluation of the anticipated quality and effect of the bypass.
(d) Unanticipated bypasses [40 CFR 122.41(m)(3)]	<ul style="list-style-type: none"> • Within 24 hours, an oral or electronic notification. • Within 7 calendar days, a report that includes an evaluation of the quality and effect of the bypass.
(e) Noncompliance with the conditions of this permit that may endanger health or the environment[40 CFR 122.41(l)(7)]	<ul style="list-style-type: none"> • Within 24 hours, an oral or electronic notification. • Within 7 calendar days, a report that contains a description of the noncompliance, and its causes; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time noncompliance is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance. [40 CFR 122.41(l)(6). • Division staff may waive the requirement for a written report on a case-by-case basis.



KHA PROJECT 015484020	DATE 01/20/2022	SCALE AS SHOWN	DESIGNED BY ARM	DRAWN BY EAC	CHECKED BY BJT
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EROSION CONTROL NOTES

**NORTH AMES STREET
SIDEWALK IMPROVEMENTS**

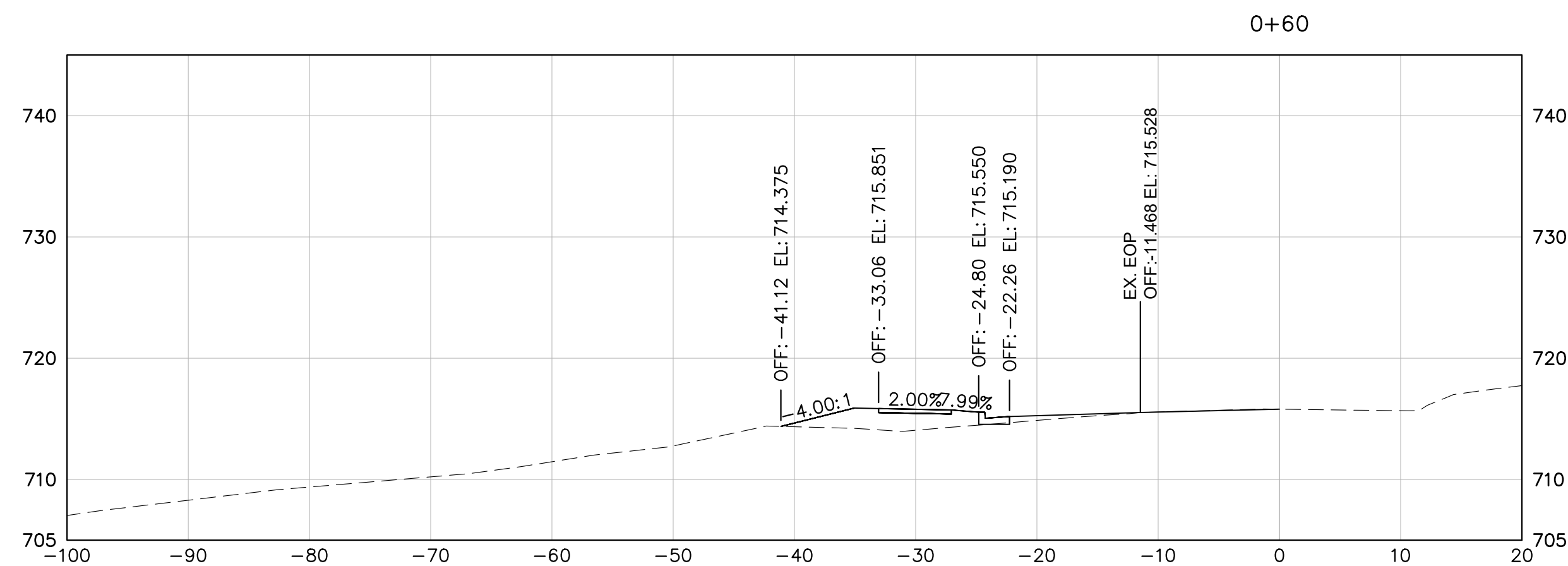
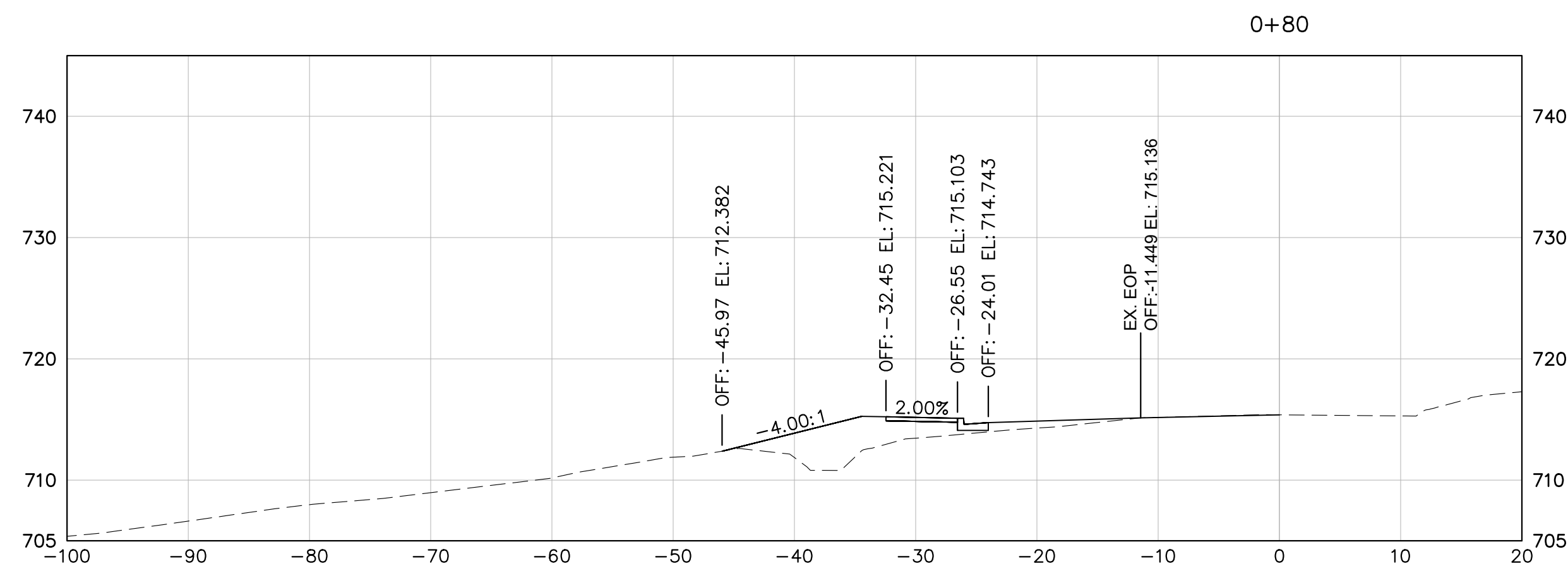
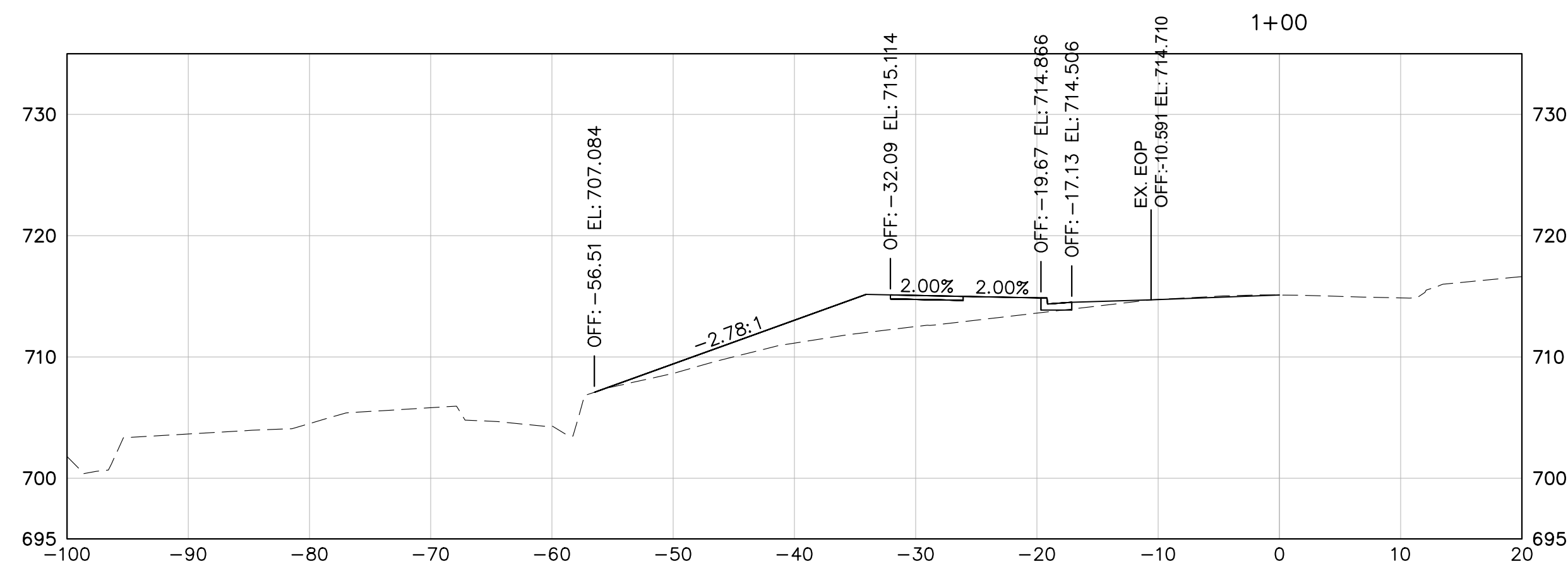
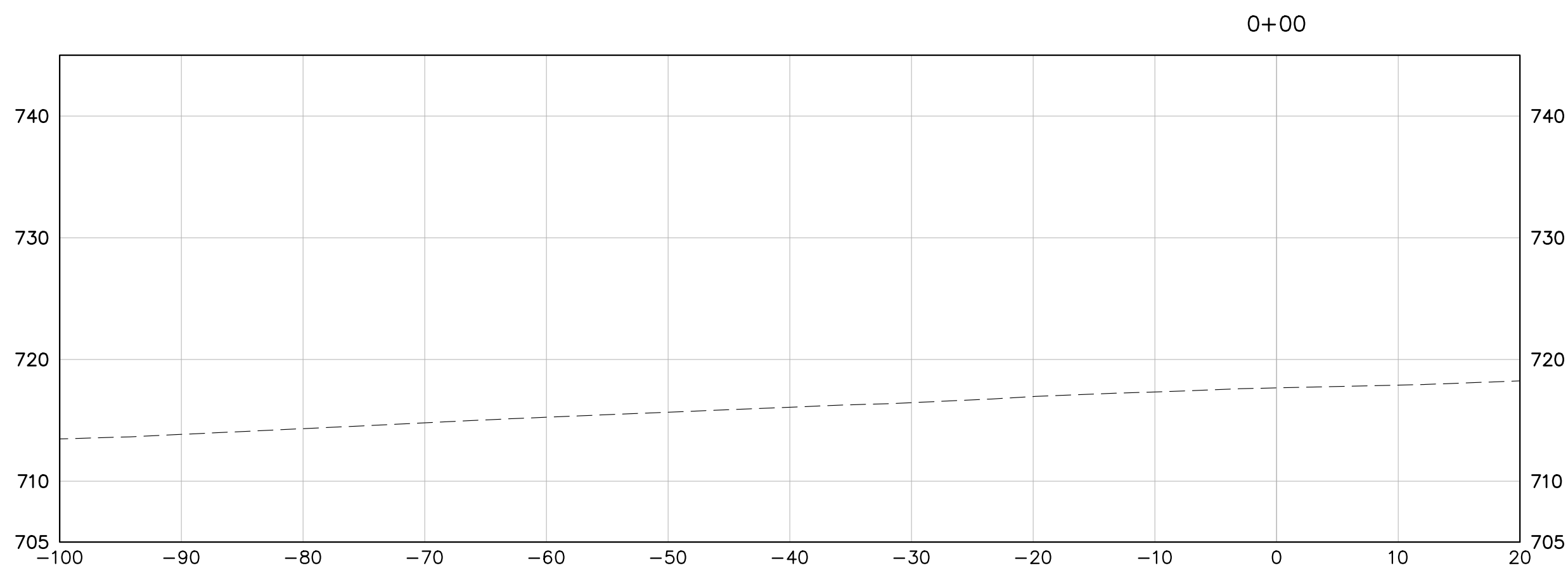
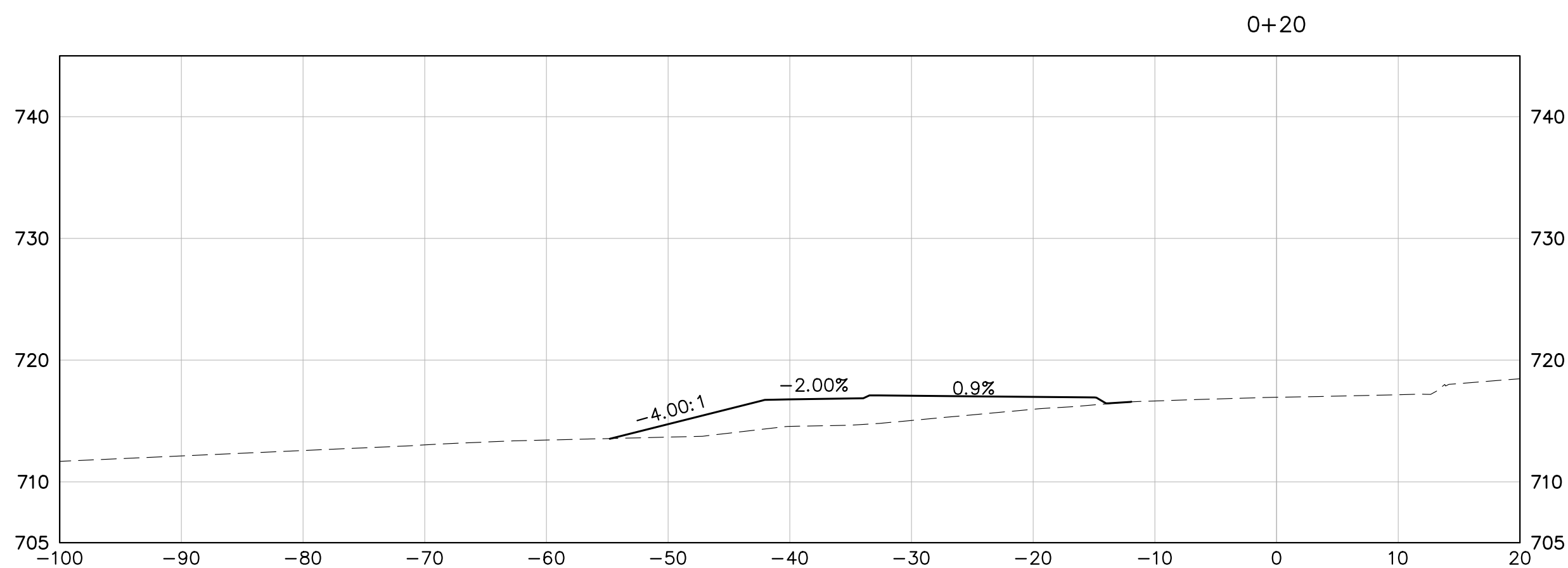
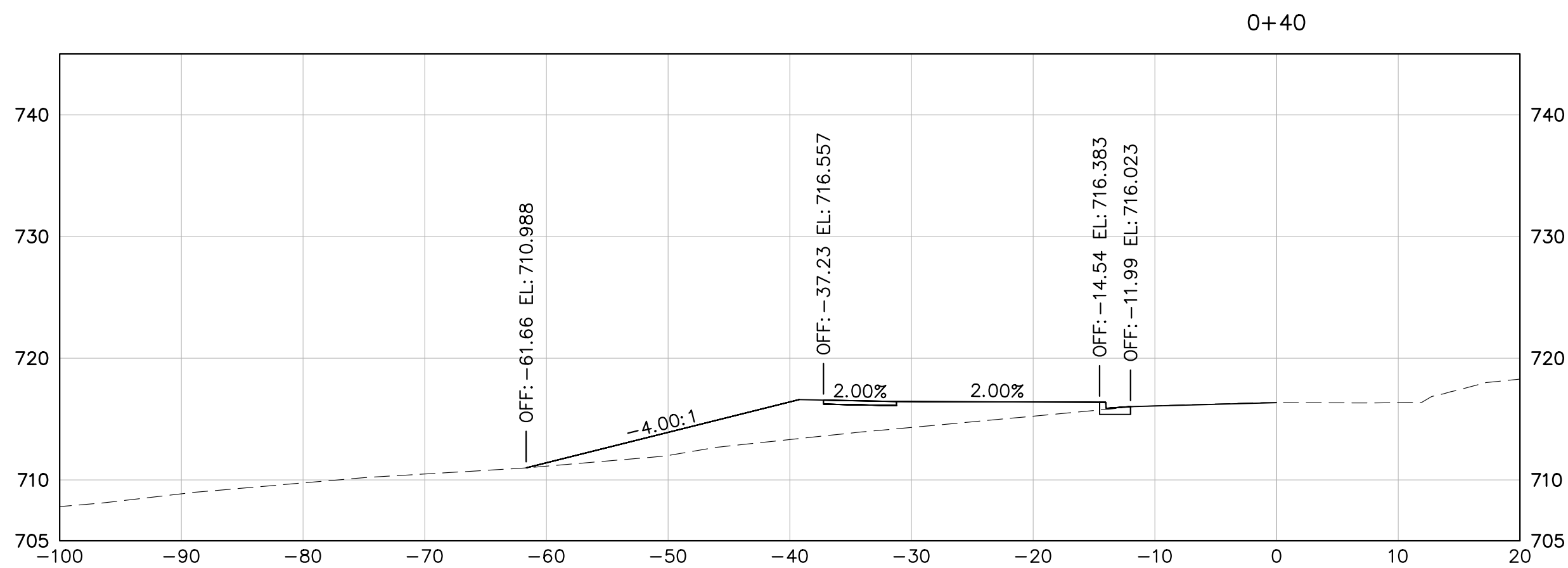
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Edited By: Kintyre, Alexandra
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 Layout: XS-01 November 19, 12:27:33pm
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 020 North Anna Street, Sidewalk
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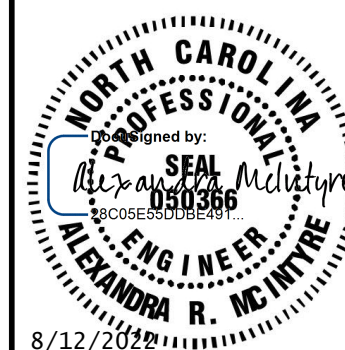


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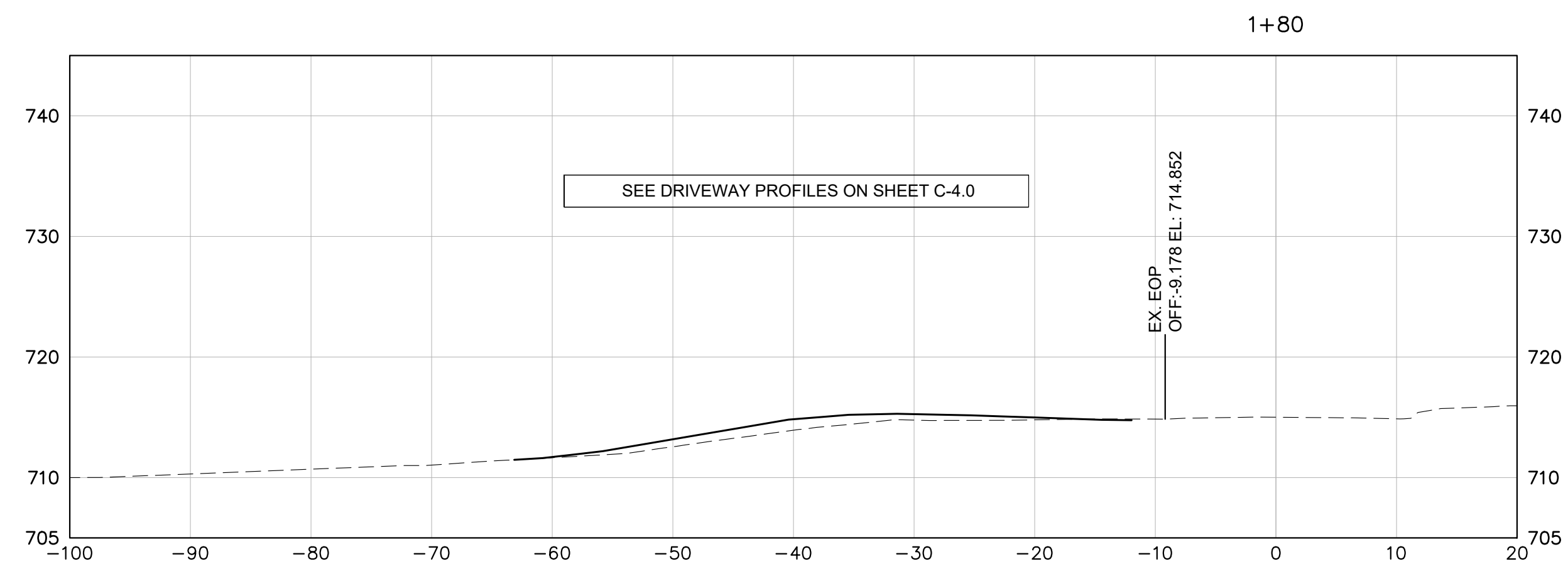
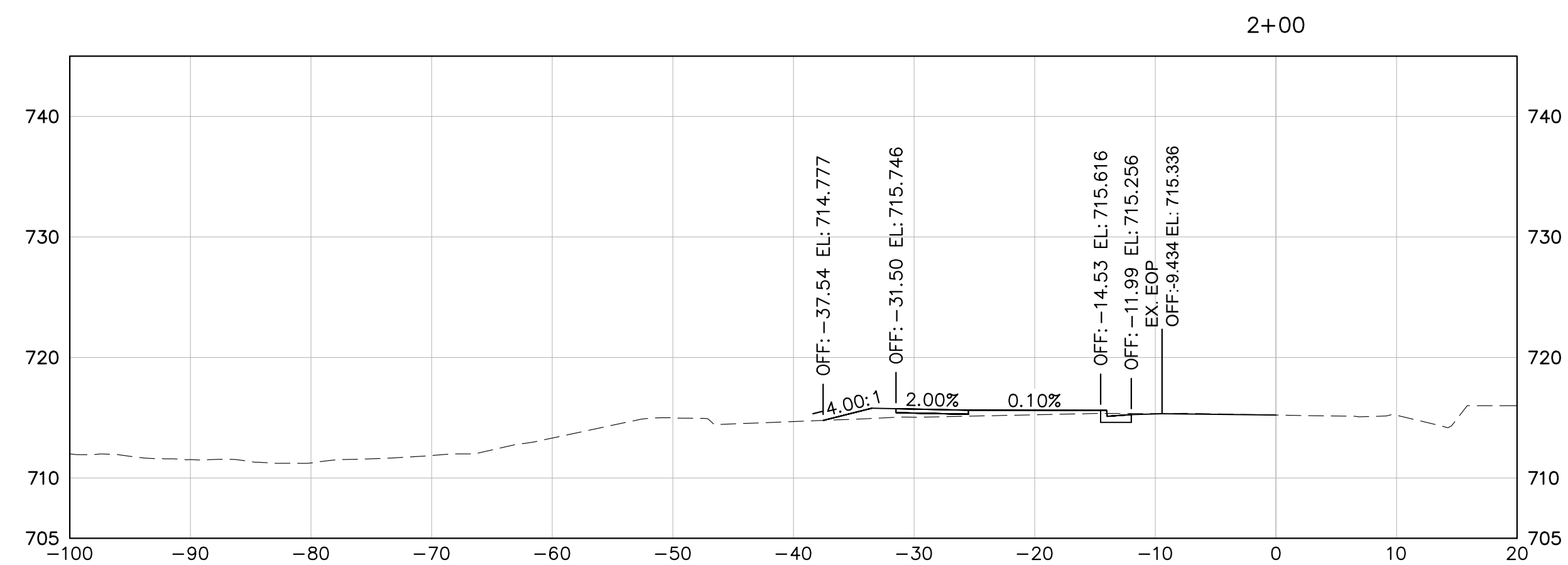
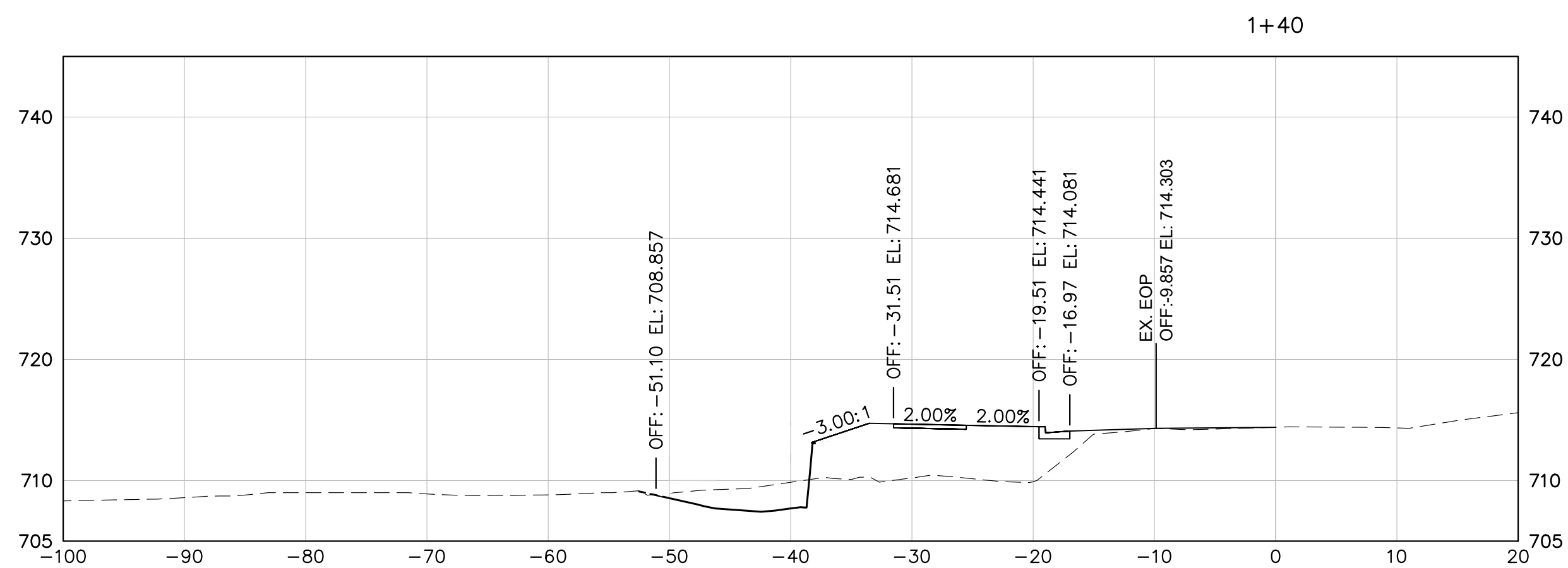
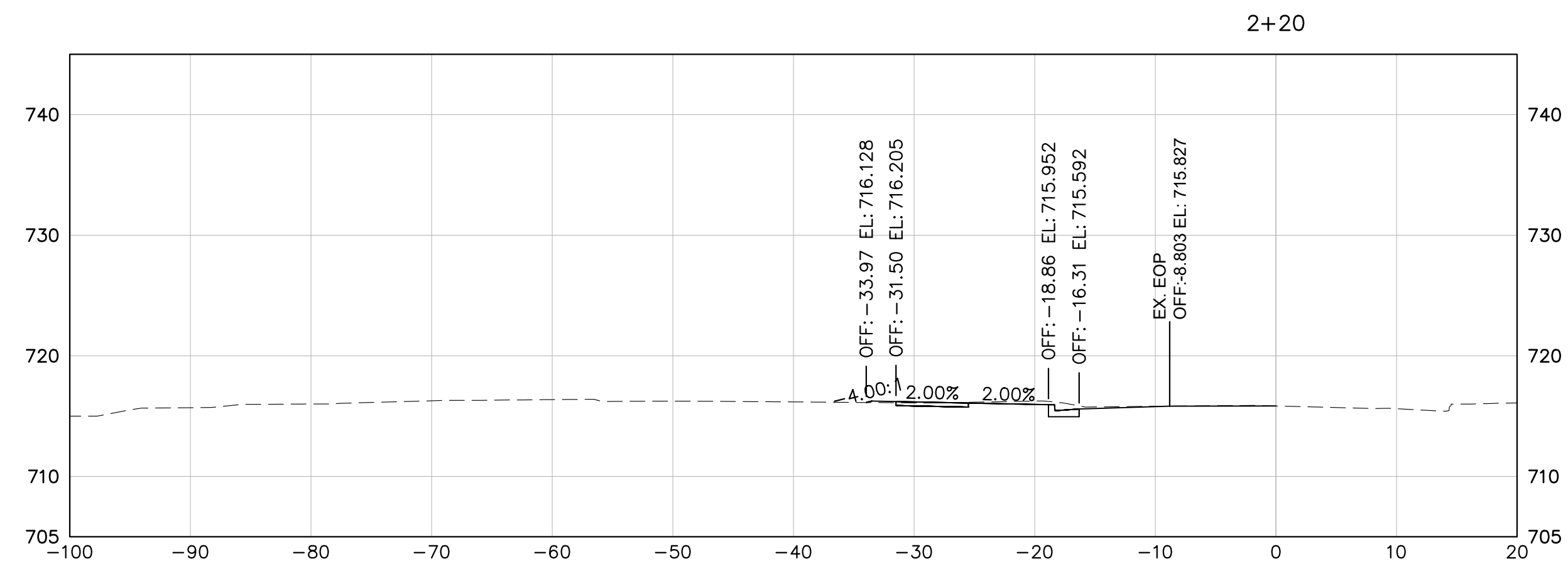
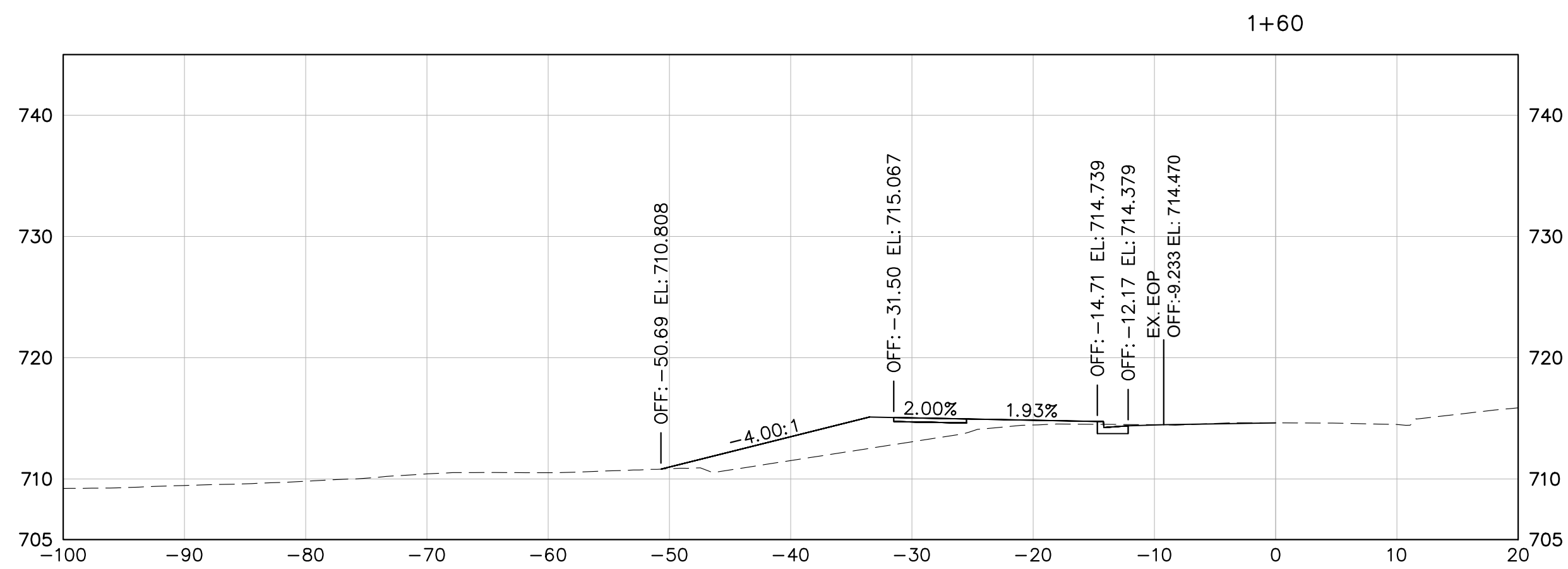
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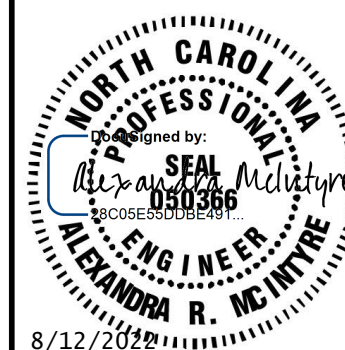
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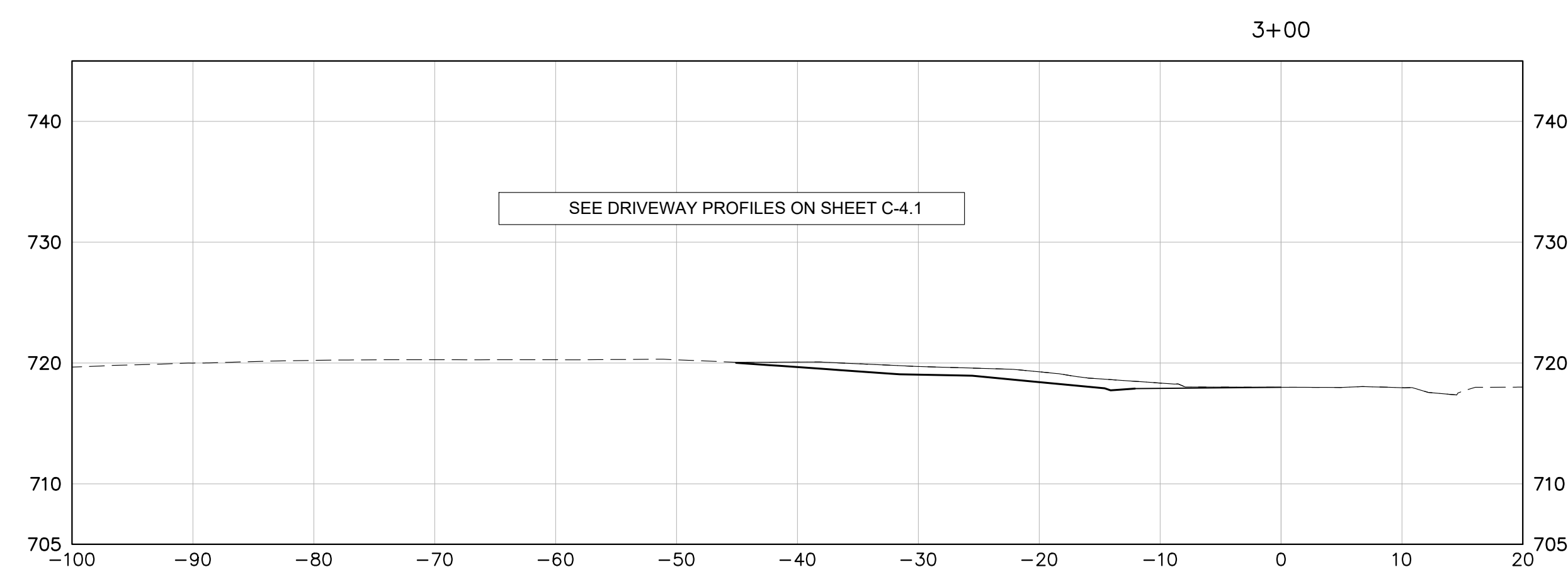
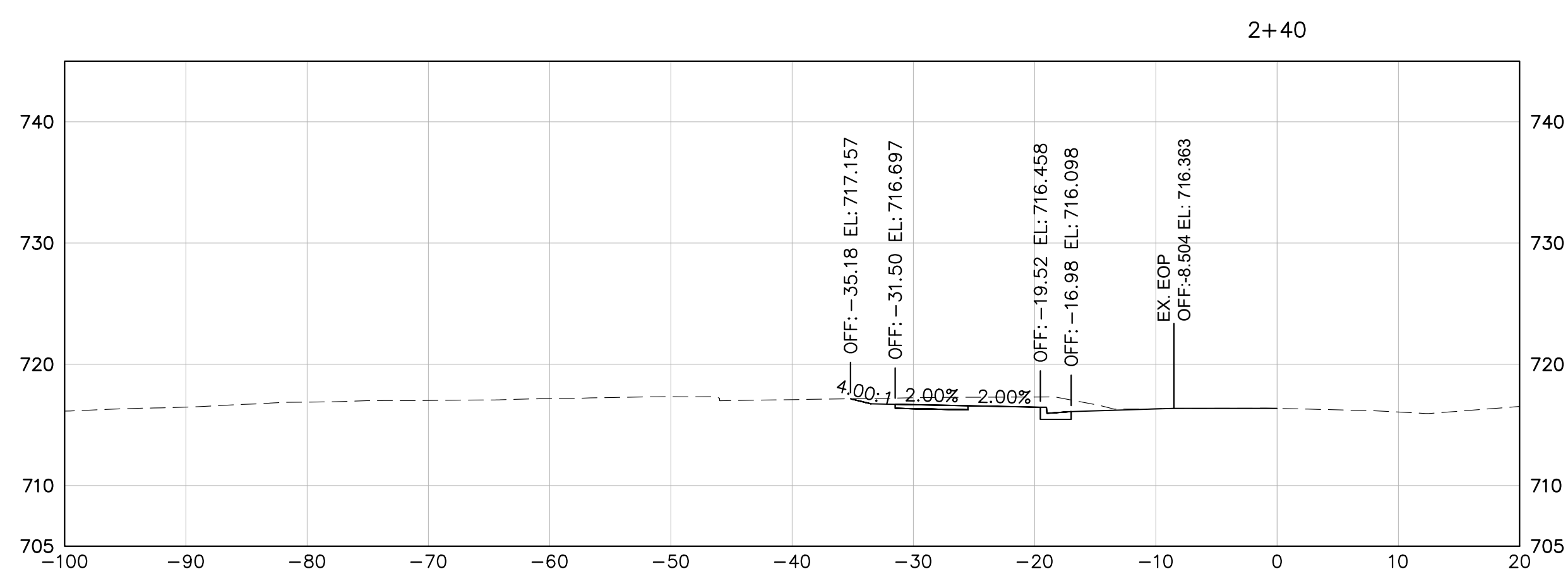
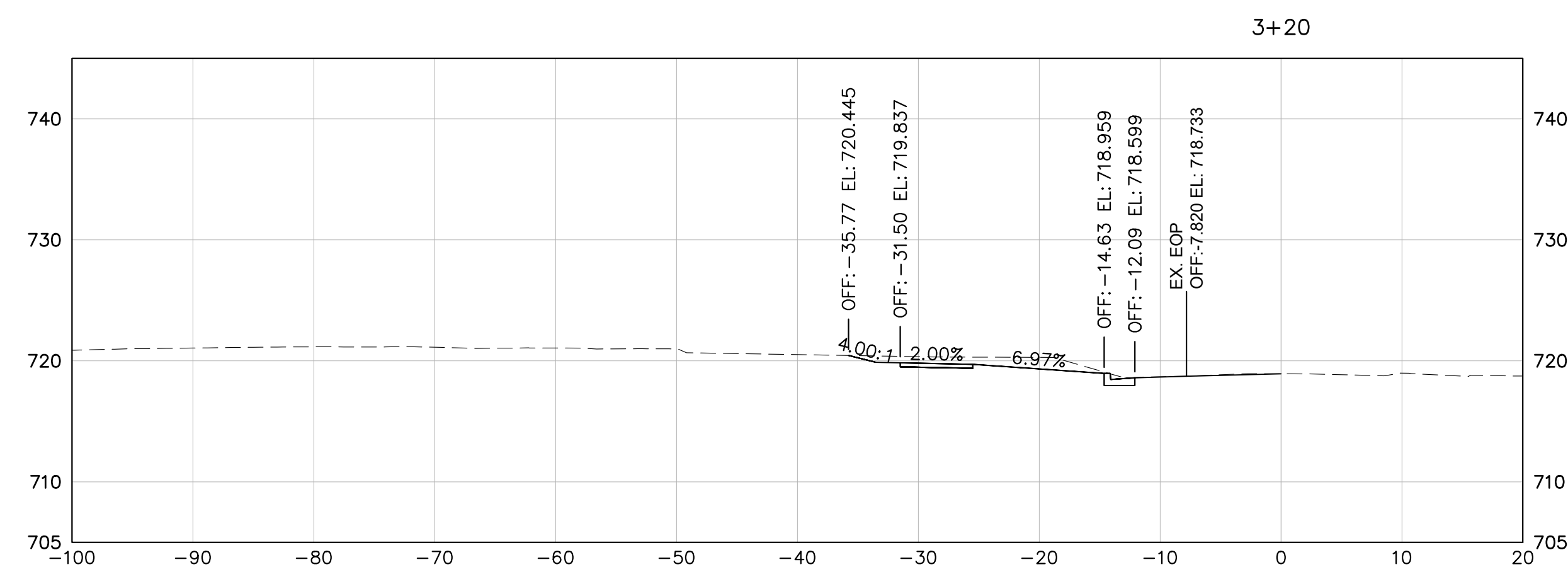
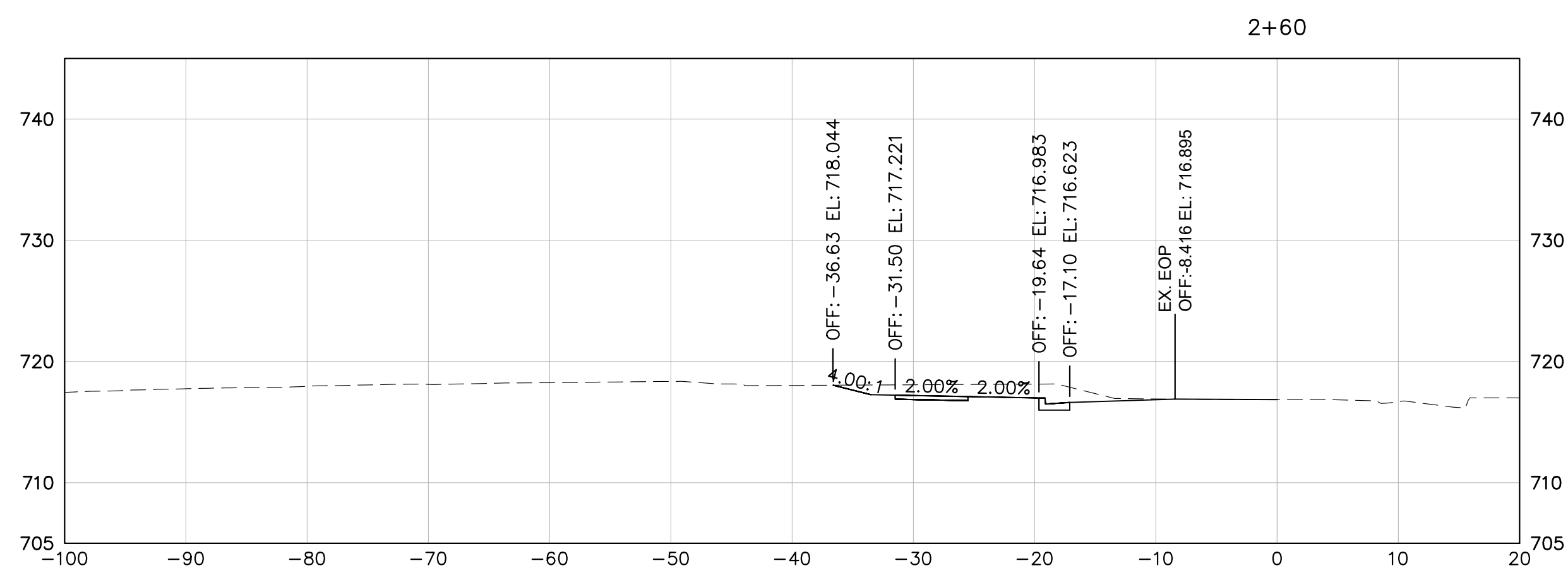
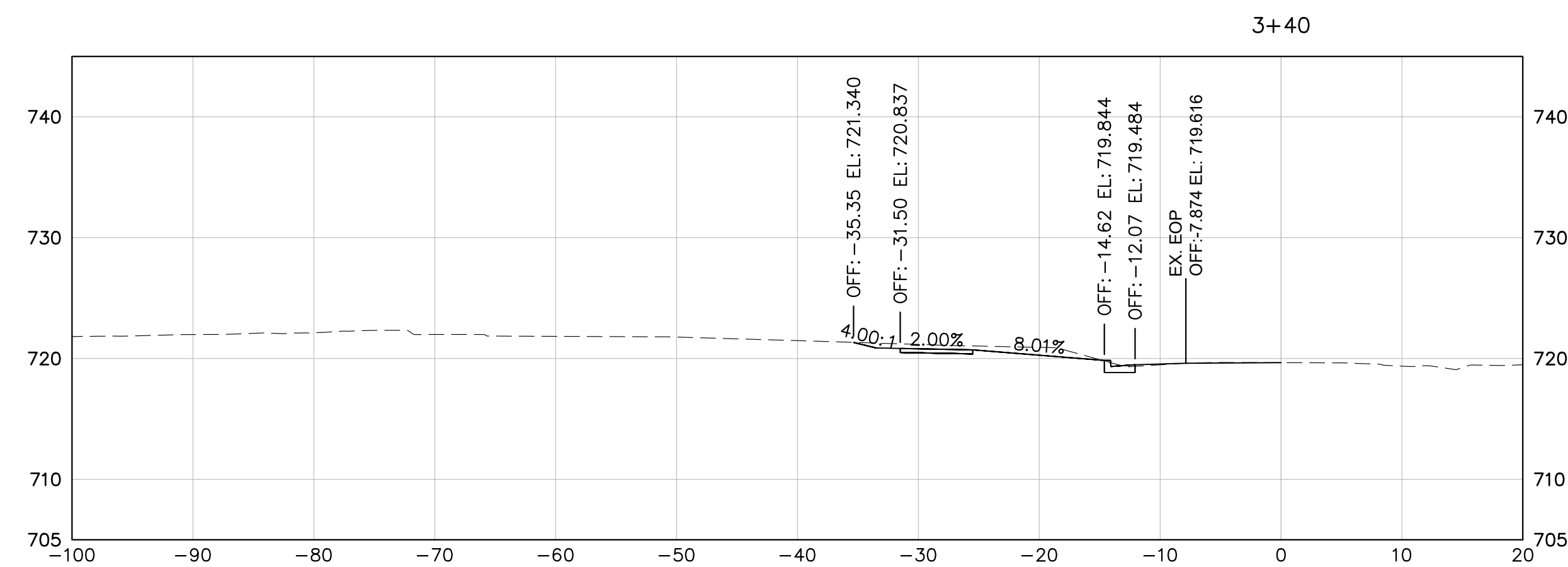
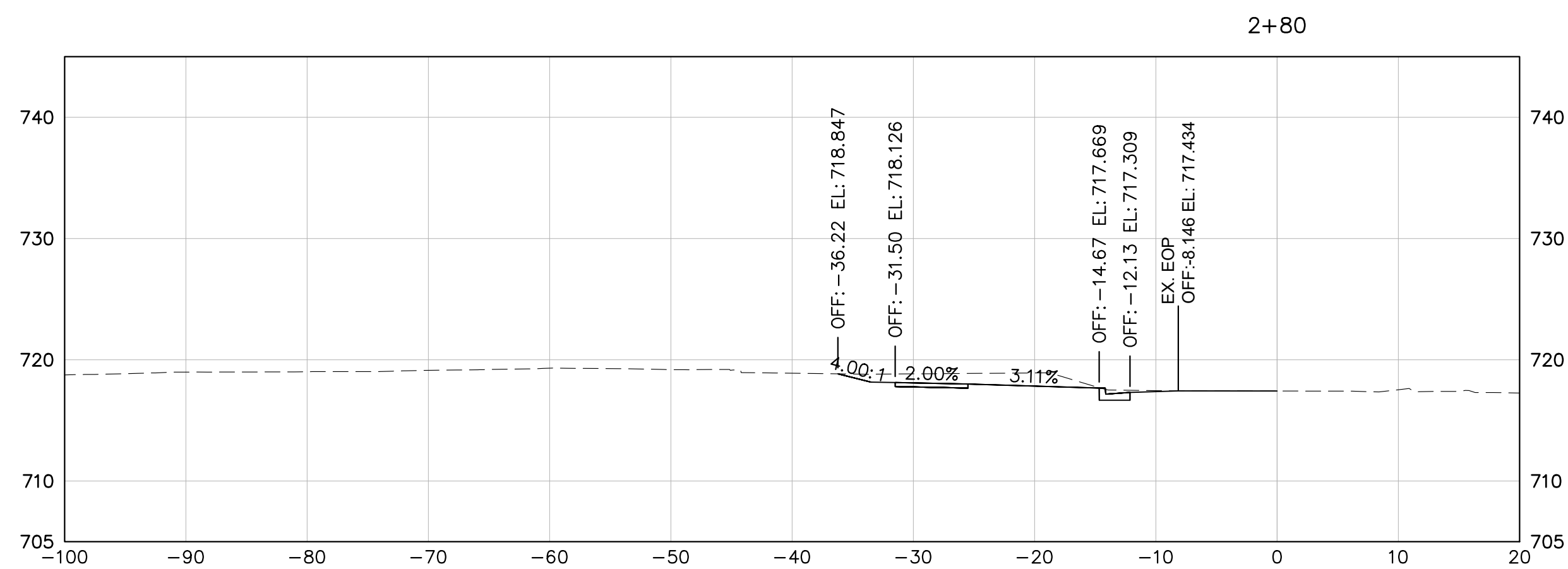
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NORTH AMES STREET SIDEWALK IMPROVEMENTS

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1018 By: Minikye, Alexandra Sheet Set: North Anna Street Sidewalk Improvements Layout: XS-03 November 19, 2021 12:27:41pm K:\CHL\PRJ\5484 - CADD\PlanSheets\C90 - CROSS SECTIONS.dwg
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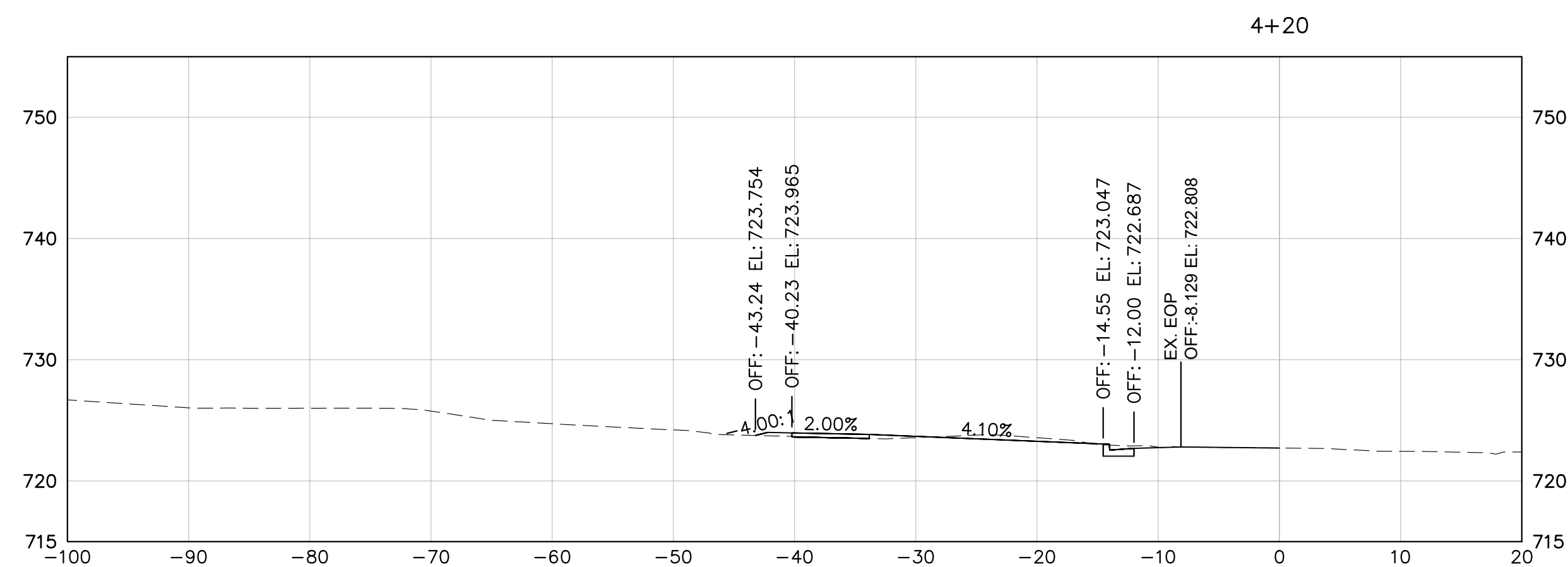
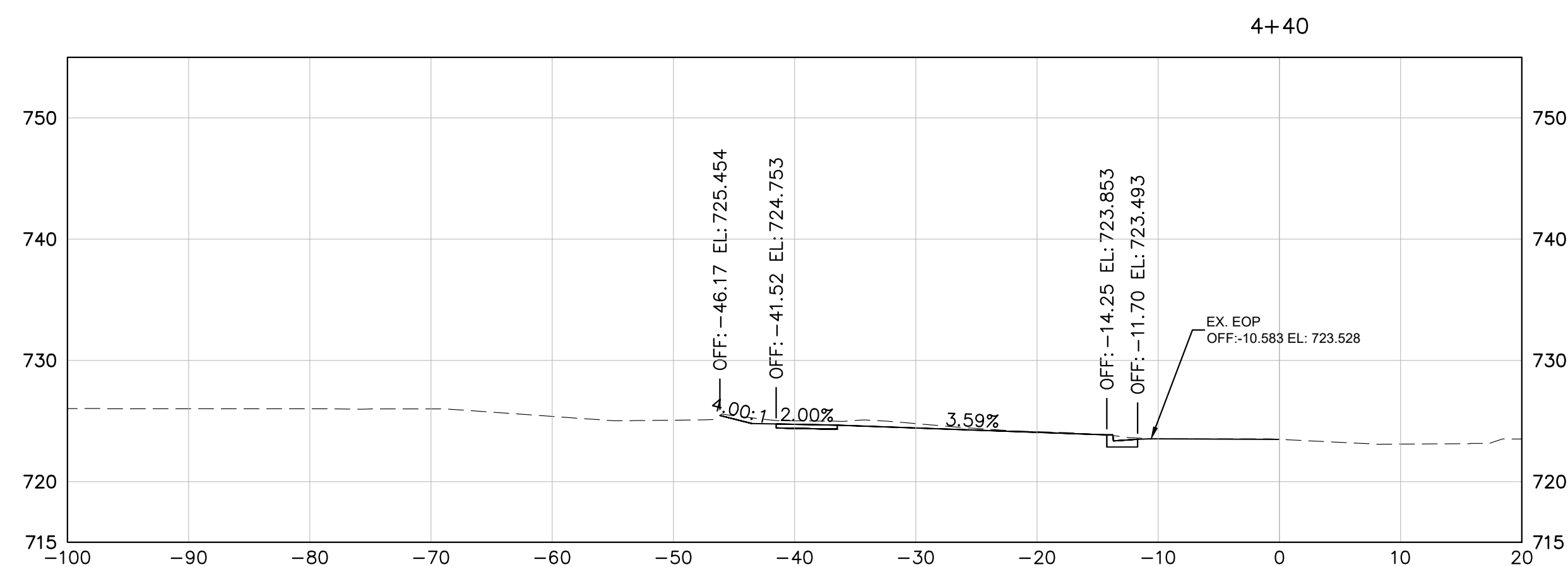
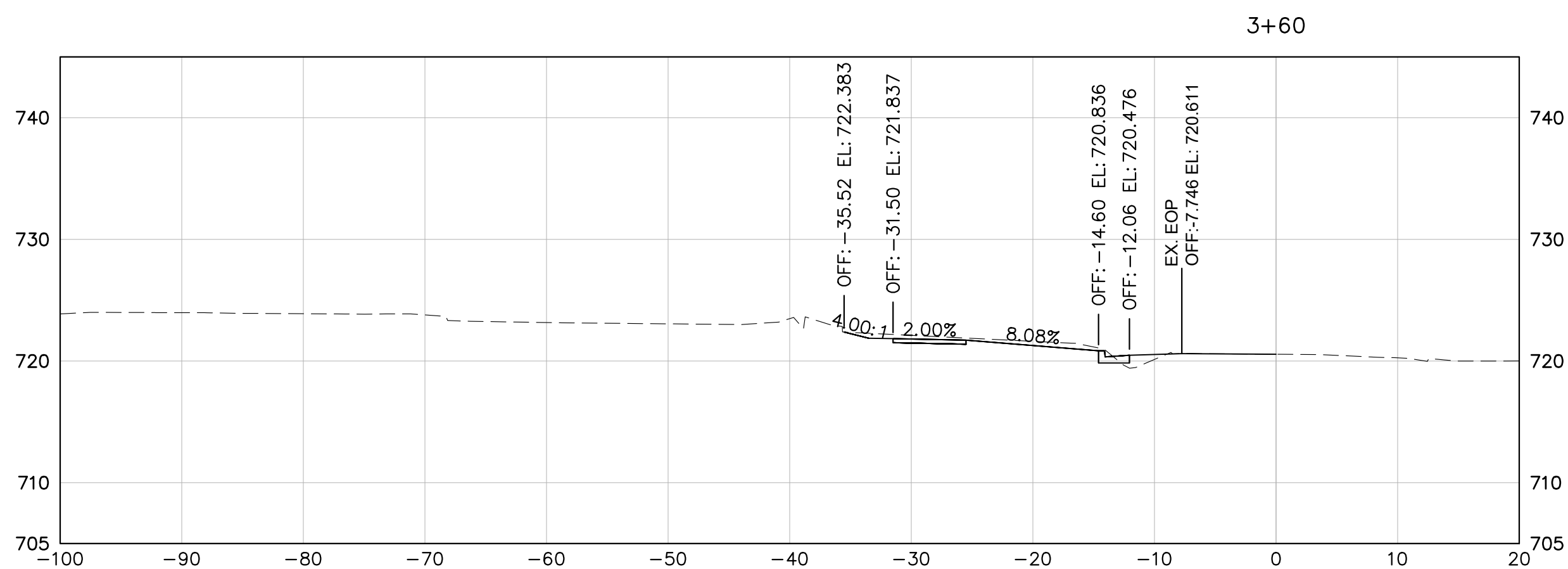
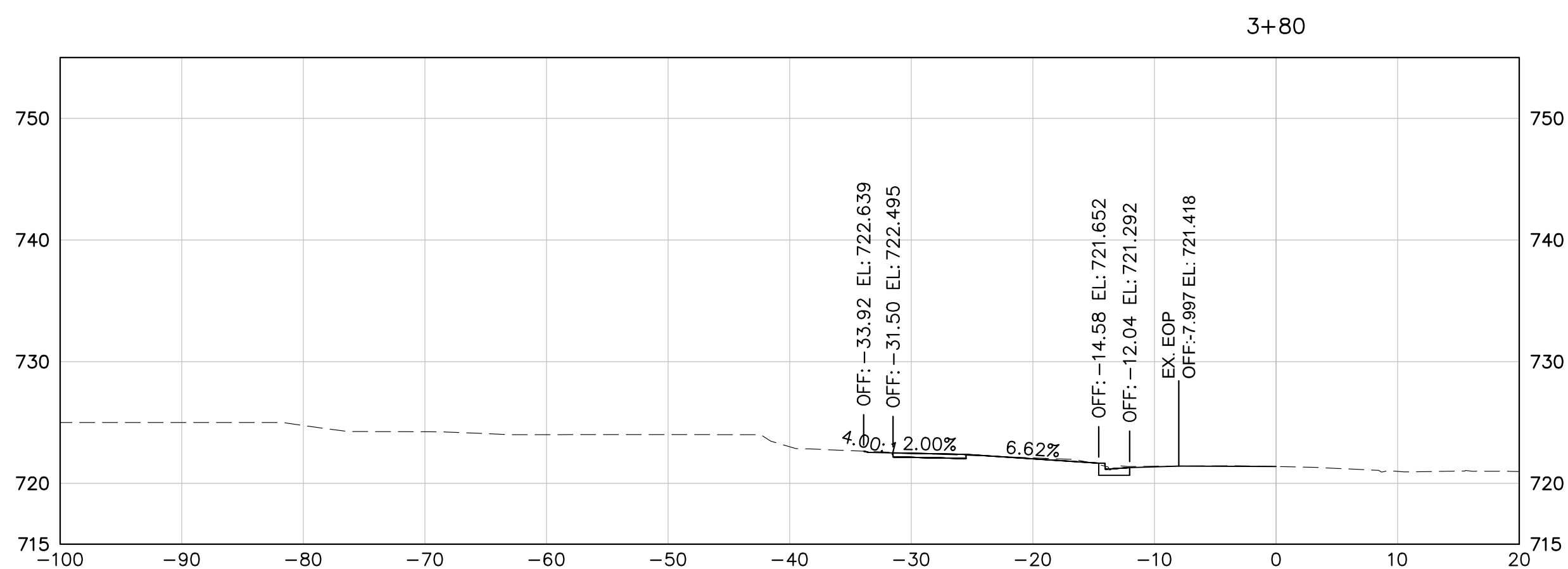
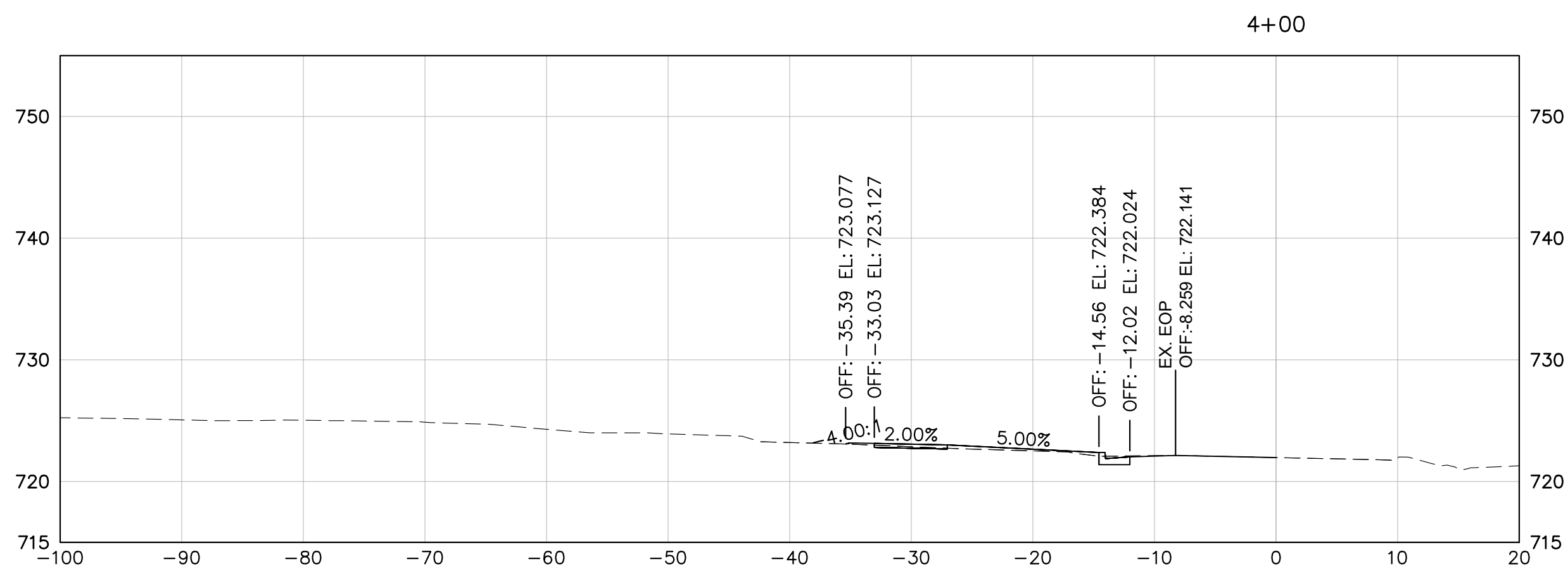
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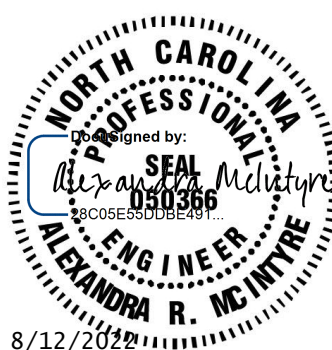
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